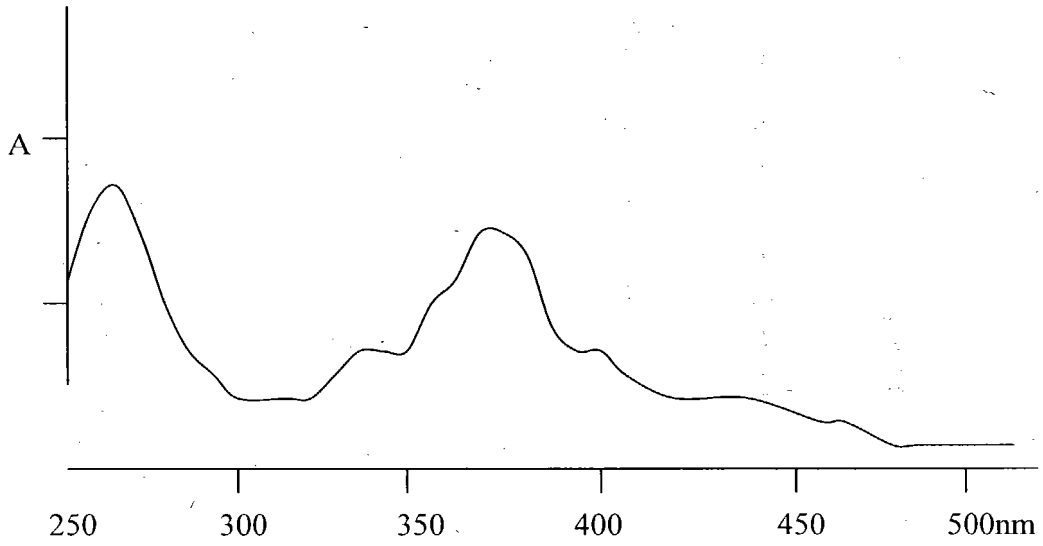


FIG. 1

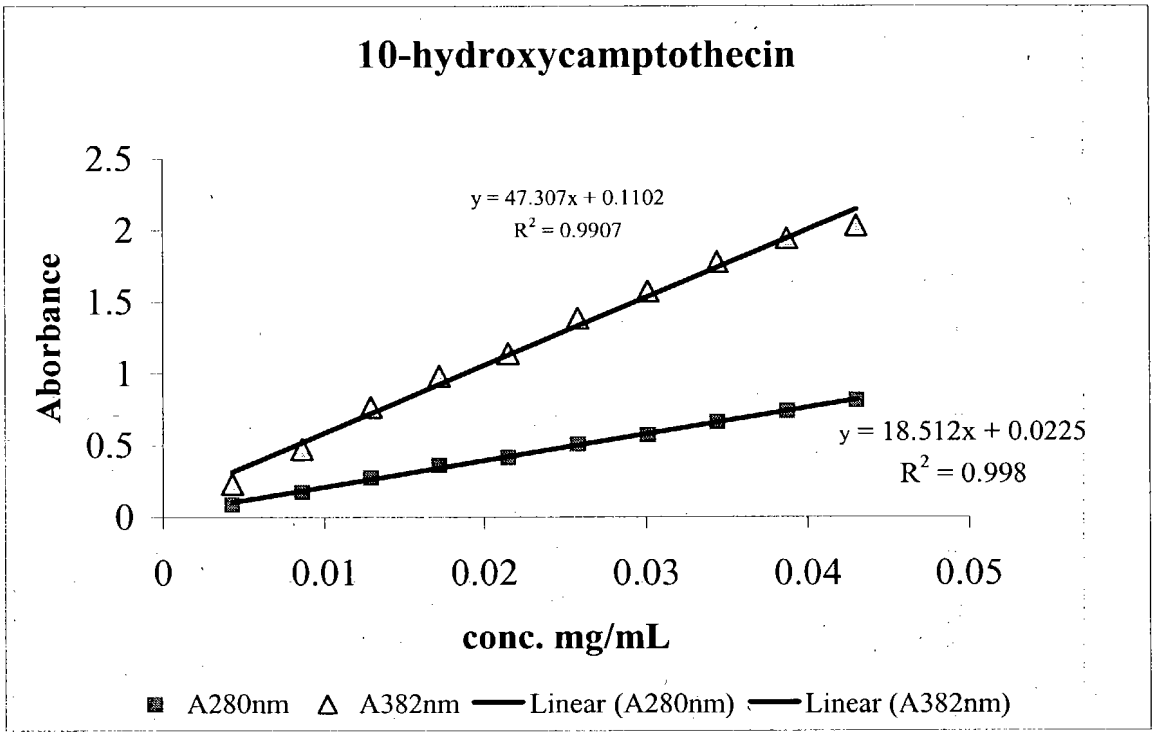

10-hydroxycamptothecin
Aborbance
2.5
2
1.5
1
0.5
0
y = 47.307x + 0.1102
R2 = 0.9907
y = 18.512x + 0.0225
R2 = 0.998
0
0.01
0.02
0.03
0.04
0.05
conc. mg/mL
A280nm
A382nm
Linear (A280nm)
Linear (A382nm)

FIG. 2

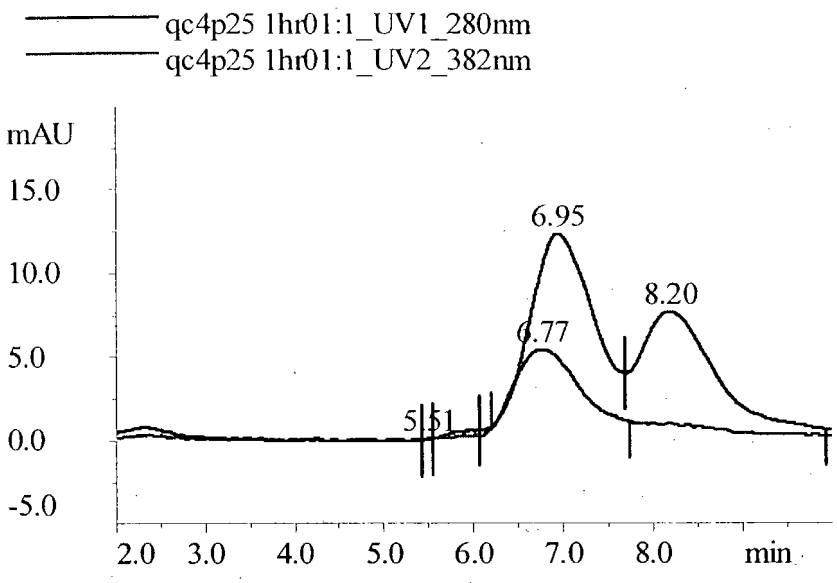

qc4p25 1hr01:1_UV1_280nm
qc4p25 1hr01:1_UV2_382nm
mAU
15.0
10.0
5.0
0.0
-5.0
6.95
8.20
6.77
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 3

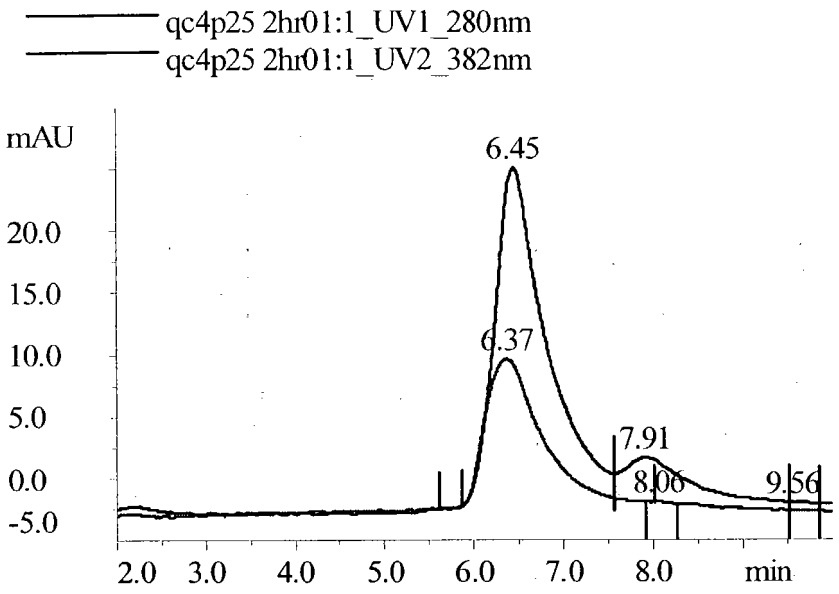

qc4p25 2hr01:1_UV1_280nm
qc4p25 2hr01:1_UV2_382nm
mAU
20.0
15.0
10.0
5.0
0.0
-5.0
6.45
6.37
7.91
8.06
9.56
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 4

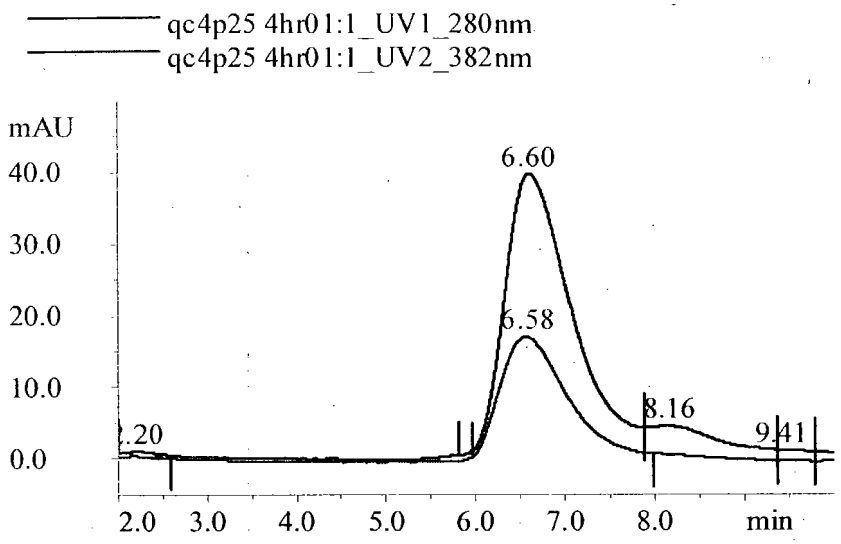

qc4p25 4hr01:1_UV1_280nm
qc4p25 4hr01:1_UV2_382nm
mAU
40.0
30.0
20.0
10.0
0.0
6.60
6.58
8.16
9.41
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 5

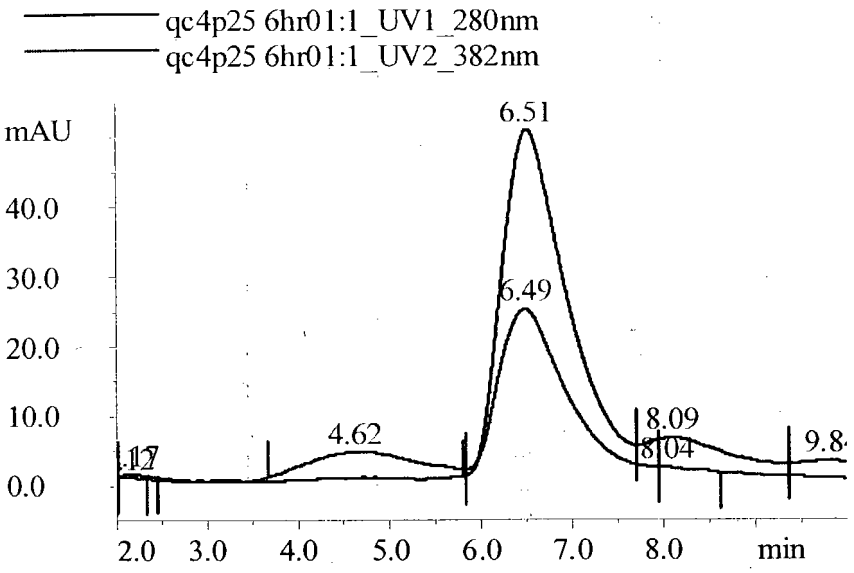

qc4p25 6hr01:1_UV1_280nm
qc4p25 6hr01:1_UV2_382nm
mAU
40.0
30.0
20.0
10.0
0.0
6.51
6.49
4.62
8.09
8.04
9.8
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 6

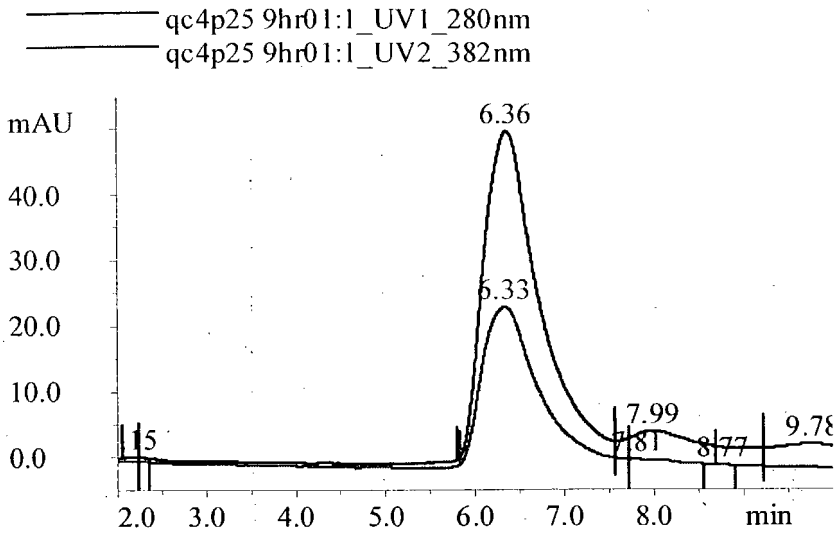

qc4p25 9hr01:1_UV1_280nm
qc4p25 9hr01:1_UV2_382nm
mAU
40.0
30.0
20.0
10.0
0.0
6.36
6.33
7.99
9.78
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 7

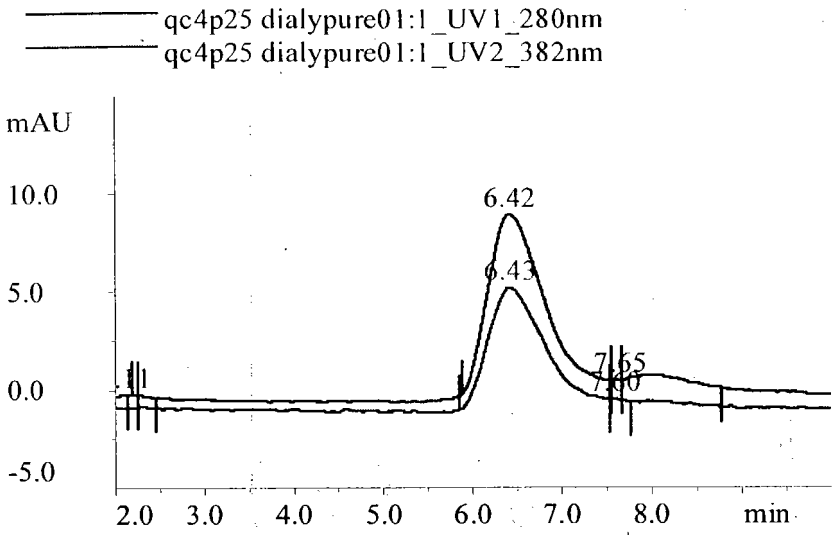

qc4p25 dialypure01:1_UV1_280nm
qc4p25 dialypure01:1_UV2_382nm
mAU
10.0
5.0
0.0
-5.0
6.42
6.43
7.65
7.60
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 8

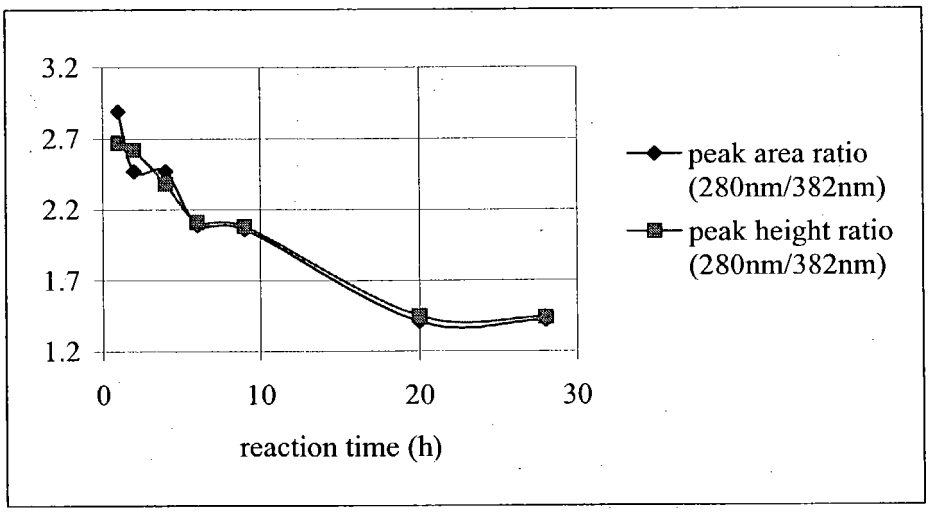

3.2
2.7
2.2
1.7
1.2
0
10
20
30
reaction time (h)
peak area ratio (280nm/382nm)
peak height ratio (280nm/382nm)

FIG. 9

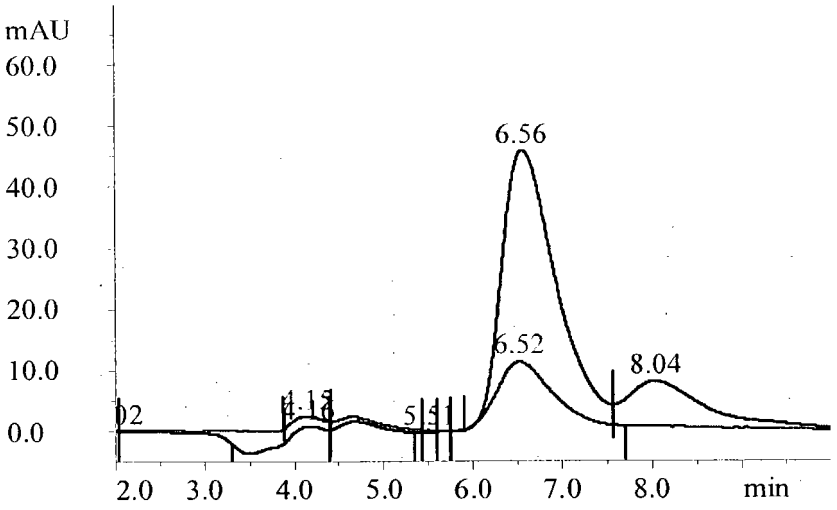


FIG. 10

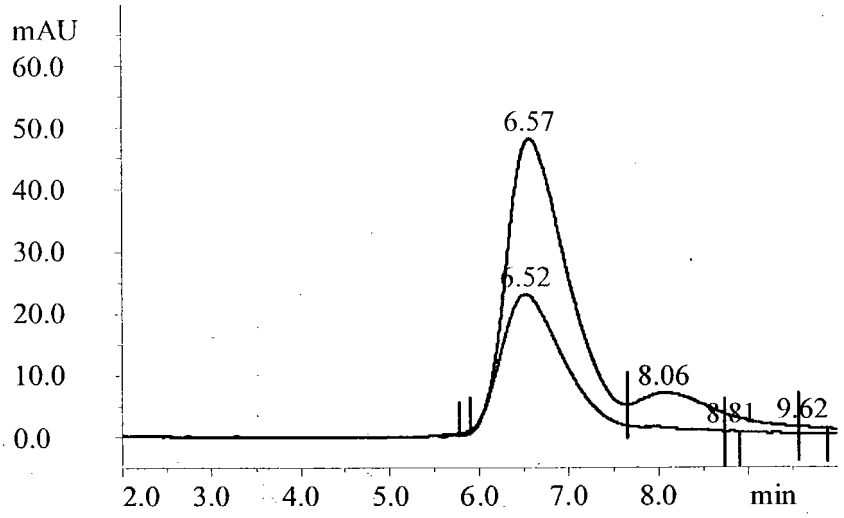

mAU
60.0
50.0
40.0
30.0
20.0
10.0
0.0
6.57
6.52
8.06
8.81
9.62
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 11

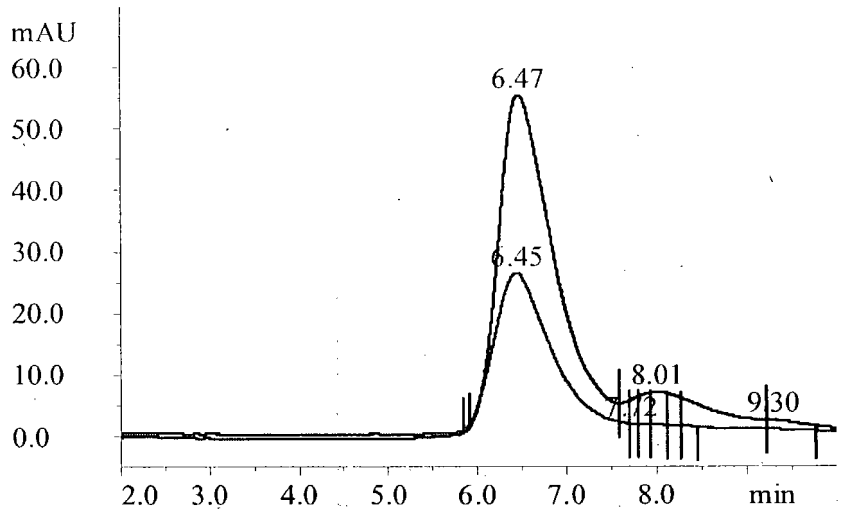

mAU
60.0
50.0
40.0
30.0
20.0
10.0
0.0
6.47
6.45
8.01
7.12
9.30
2.0
3.0
4.0
5.0
6.0
7.0
8.0
min

FIG. 12

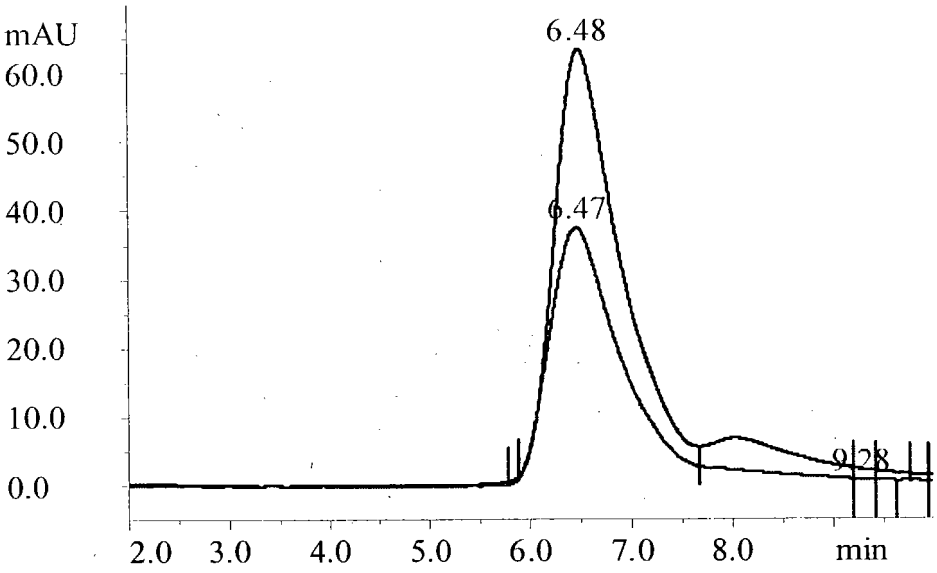


FIG. 13

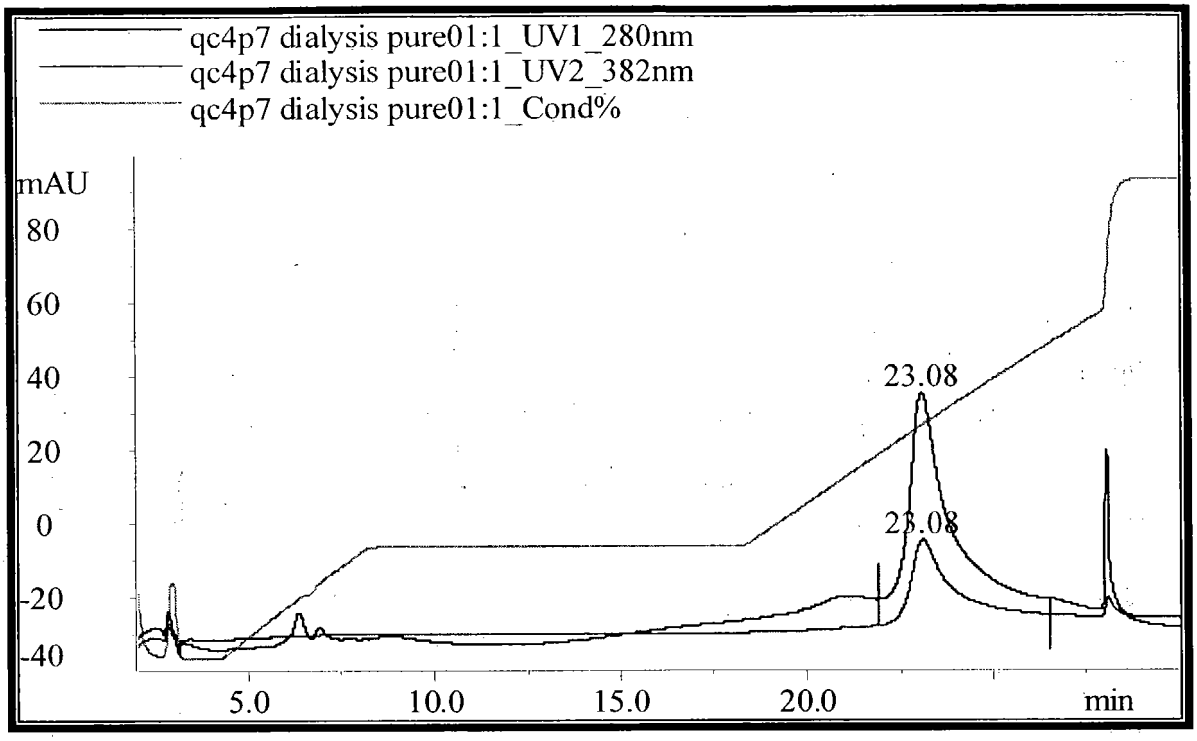

qc4p7 dialysis pure01:1_UV1_280nm
qc4p7 dialysis pure01:1_UV2_382nm
qc4p7 dialysis pure01:1_Cond%
mAU
80
60
40
20
0
-20
-40
23.08
23.08
5.0
10.0
15.0
20.0
min

FIG. 14

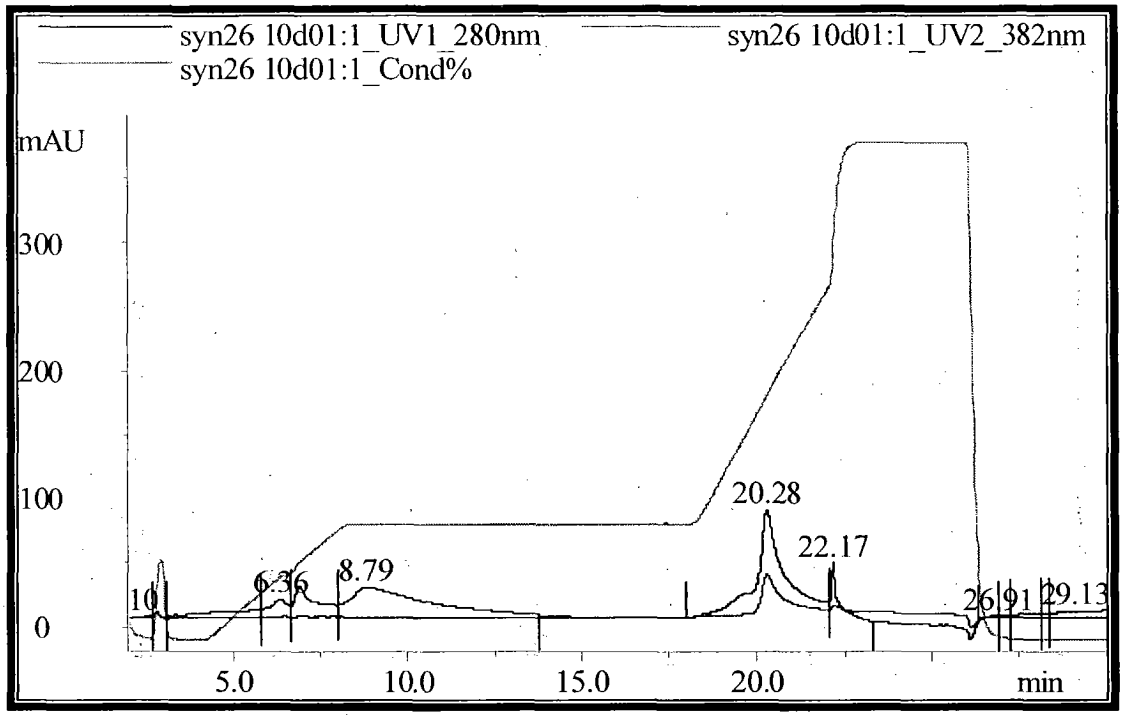
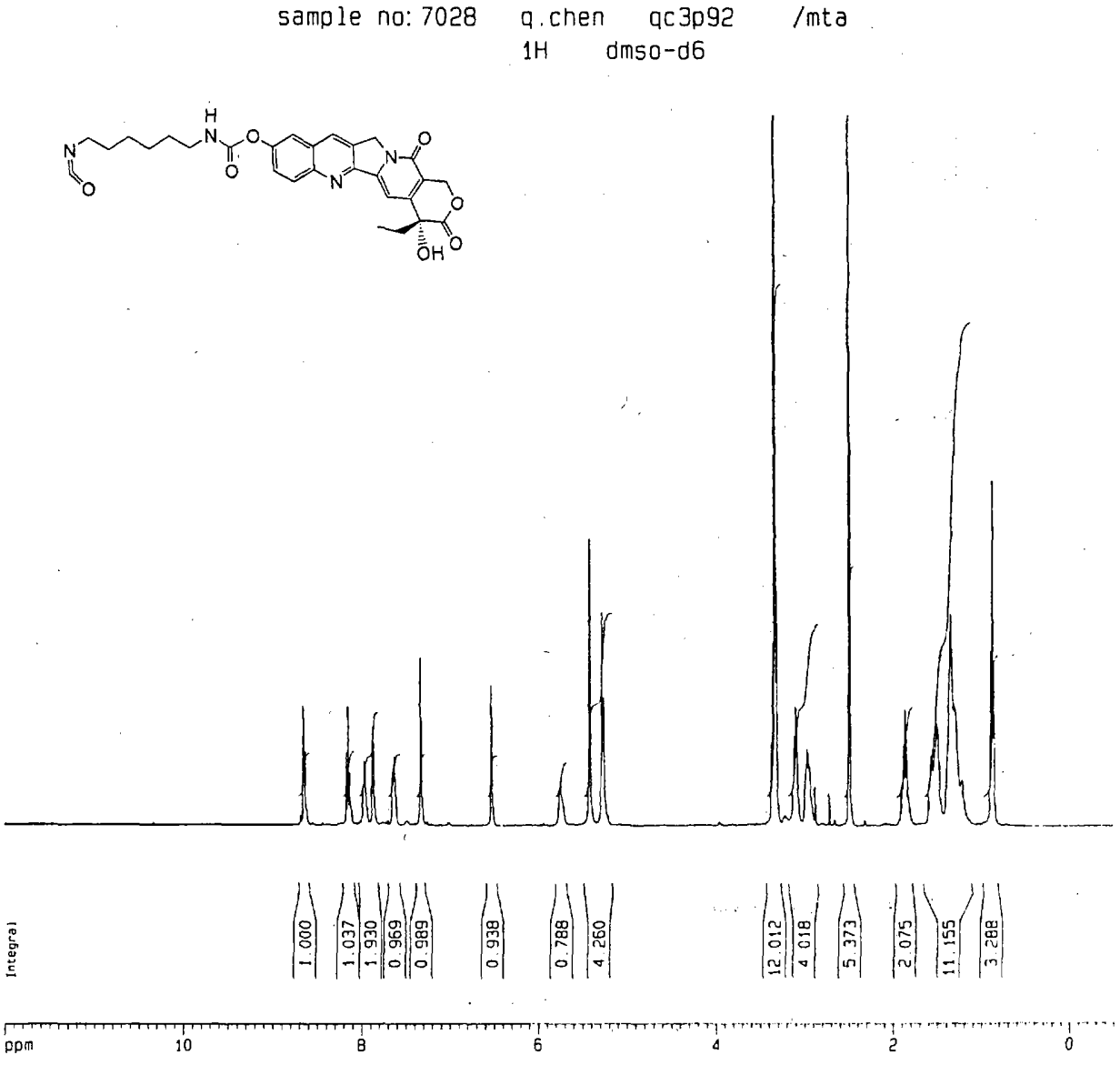

syn26 10d01:1_UV1_280nm
syn26 10d01:1_UV2_382nm
syn26 10d01:1_Cond%
mAU
300
200
100
0
20.28
22.17
6.36
8.79
10
26.91
29.13
5.0
10.0
15.0
20.0
min

FIG. 15

FIG. 16



Current Data Parameters

NAME	chen7028
EXPNO	1
PROCNO	1

F2 - Acquisition Parameter

Date_	20011218
Time	13.49
INSTRUM	av400
PROBHD	5 mm BBI 1H-
PULPROG	zg30
TD	32768
SOLVENT	DMSO
NS	150
DS	2
SWH	8012.820 Hz
FIDRES	0.244532 Hz
AQ	2.0447731 se
RG	128
DW	62.400 us
DE	6.00 us
TE	300.0 K
D1	1.00000000 se

======== CHANNEL f1 ======

NUC1	1H
P1	10.00 us
PL1	4.70 dB
SFO1	400.1320000 MH

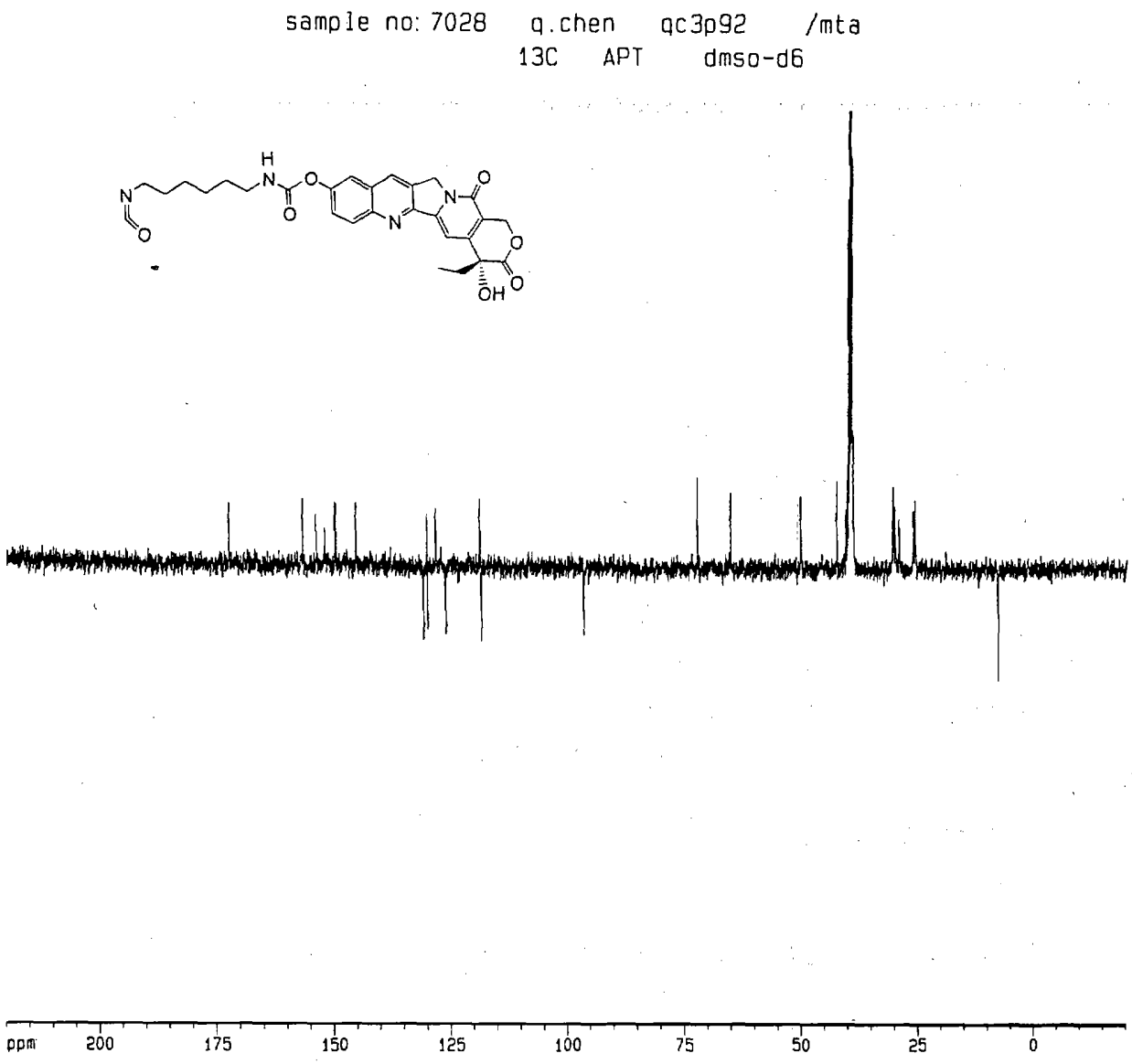
F2 - Processing parameters

SI	32768
SF	400.1300070 MH
WDW	EM
SSB	0
LB	0.20 Hz
GB	0
PC	0.50

1D NMR plot parameters

CX	20.00 cm
CY	50.00 cm
F1P	12 000 pp
F1	4801.56 Hz
F2P	-0 500 pp
F2	-200.07 Hz
PPMCM	0.62500 pp
HZCM	250.08125 Hz

FIG. 17




```
Current Data Parameters
NAME            chen7028
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20011218
Time                12.10
INSTRUM             av400
PROBHD     5 mm BBI 1H-
PULPROG             jmod
TD                 32768
SOLVENT             DMSO
NS                  1670
DS                     4
SWH           25062.656 Hz
FIDRES        0.764852 Hz
AQ            0.6537716 sec
RG               14596.5
DW               19.950 usec
DE                35.57 usec
TE                300.0 K
CNST2         145.0000000
CNST11          1.0000000
D1              3.00000000 sec
d13             0.00000300 sec
d20             0.00689655 sec
DELTA           0.00001783 sec

======== CHANNEL f1 ========
NUC1                  13C
P1                  14.00 usec
p2                  28.00 usec
PL1                  3.00 dB
SFO1          100.6227290 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                  1H
PCPD2               70.00 usec
PL2                120.00 dB
PL12                17.00 dB
SFO2          400.1320000 MHz

F2 - Processing parameters
SI                 32768
SF            100.6128172 MHz
WDW                   EM
SSB                    0
LB                  3.00 Hz
GB                     0
PC                  1.00

1D NMR plot parameters
CX                 20.00 cm
CY                 15.00 cm
F1P               220.000 ppm
F1              22134.82 Hz
F2P               -20.000 ppm
F2              -2012.26 Hz
PPMCM             12.00000 ppm/cm
HZCM            1207.35388 Hz/cm
```

lsims15458 Scan 2 (Av 7-9 Acq) 100%=3270 mv 7 Jan 02 13:55
LRP +LSIMS SL11760: QC3P92 * Matrix: Thioglycerol

FIG. 18

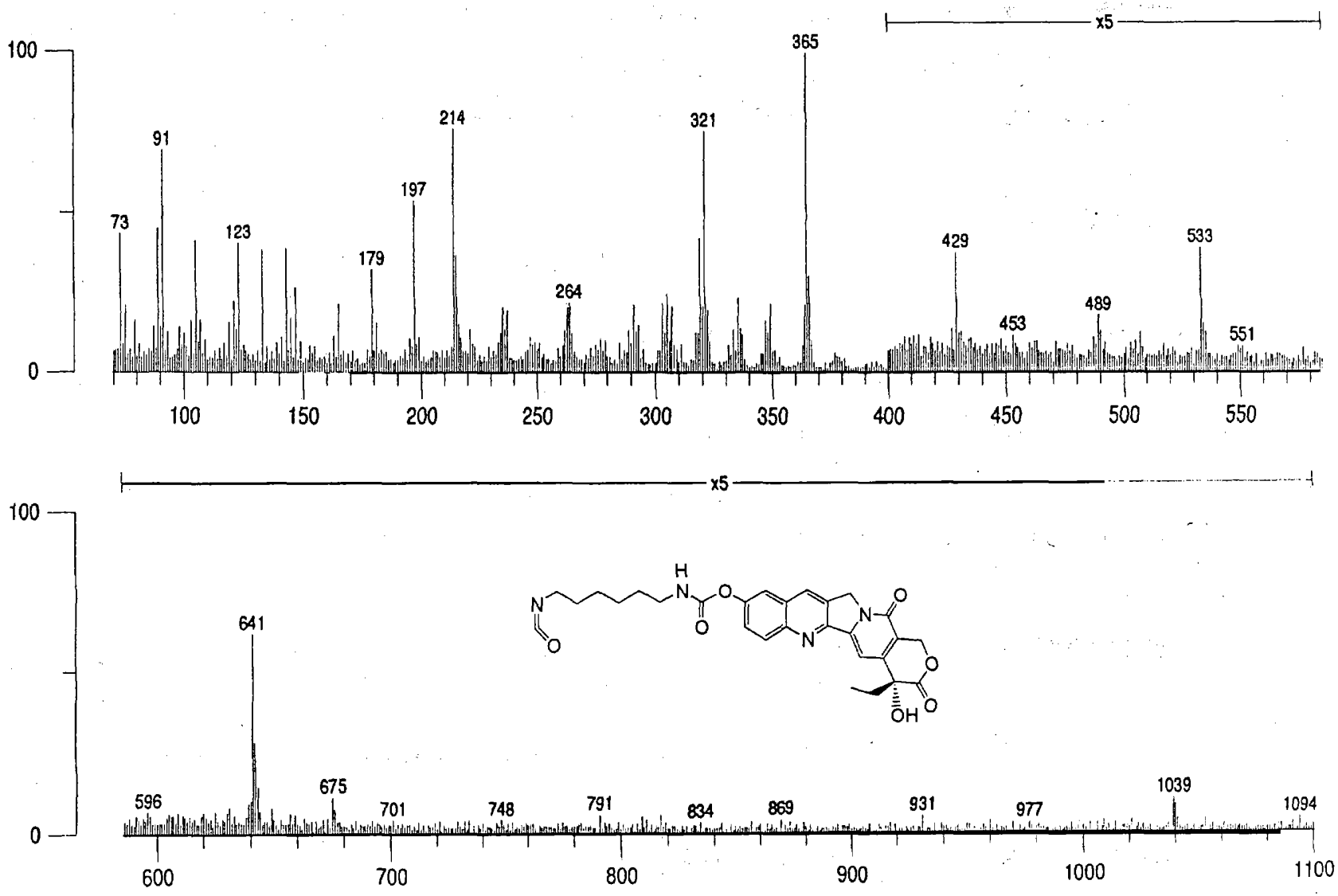
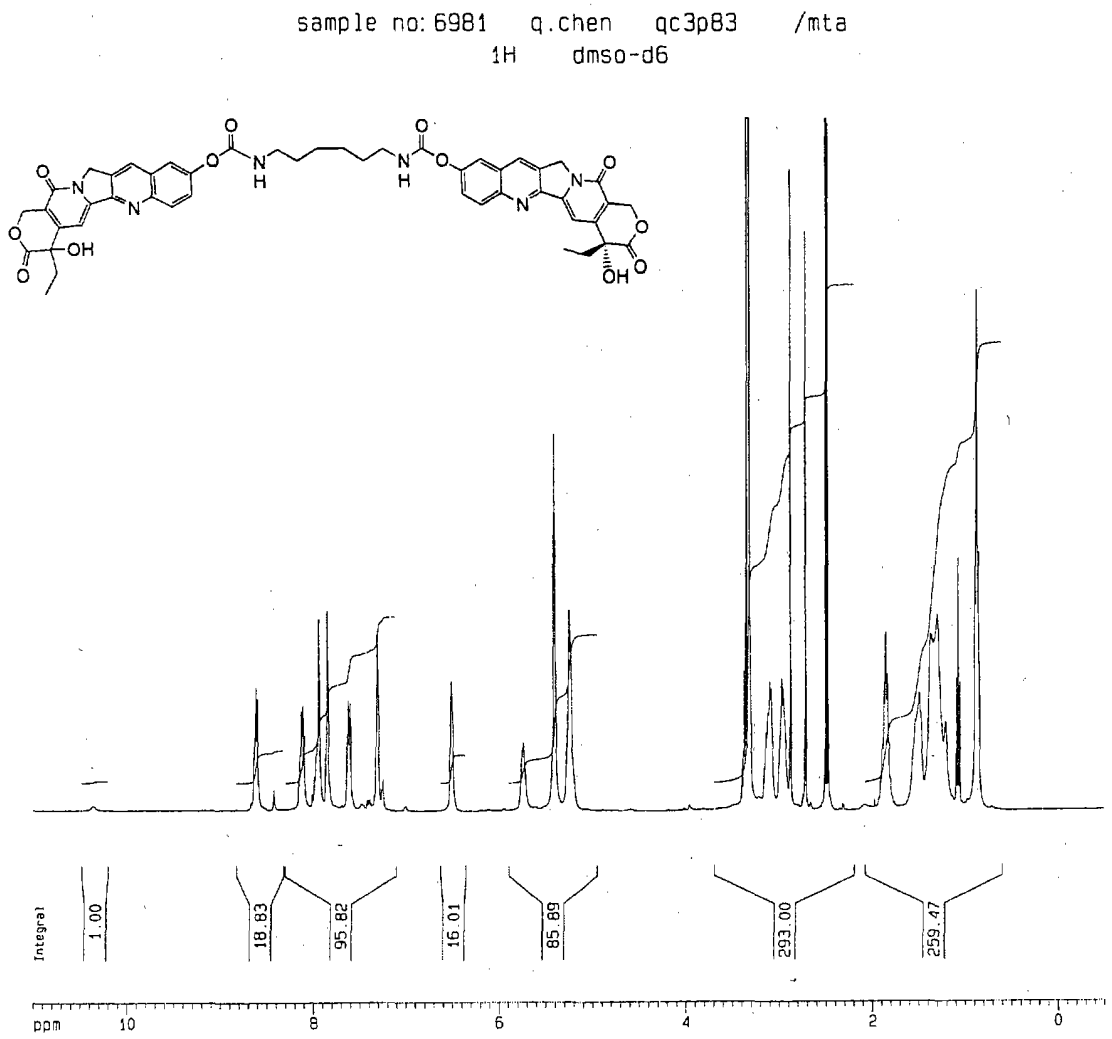
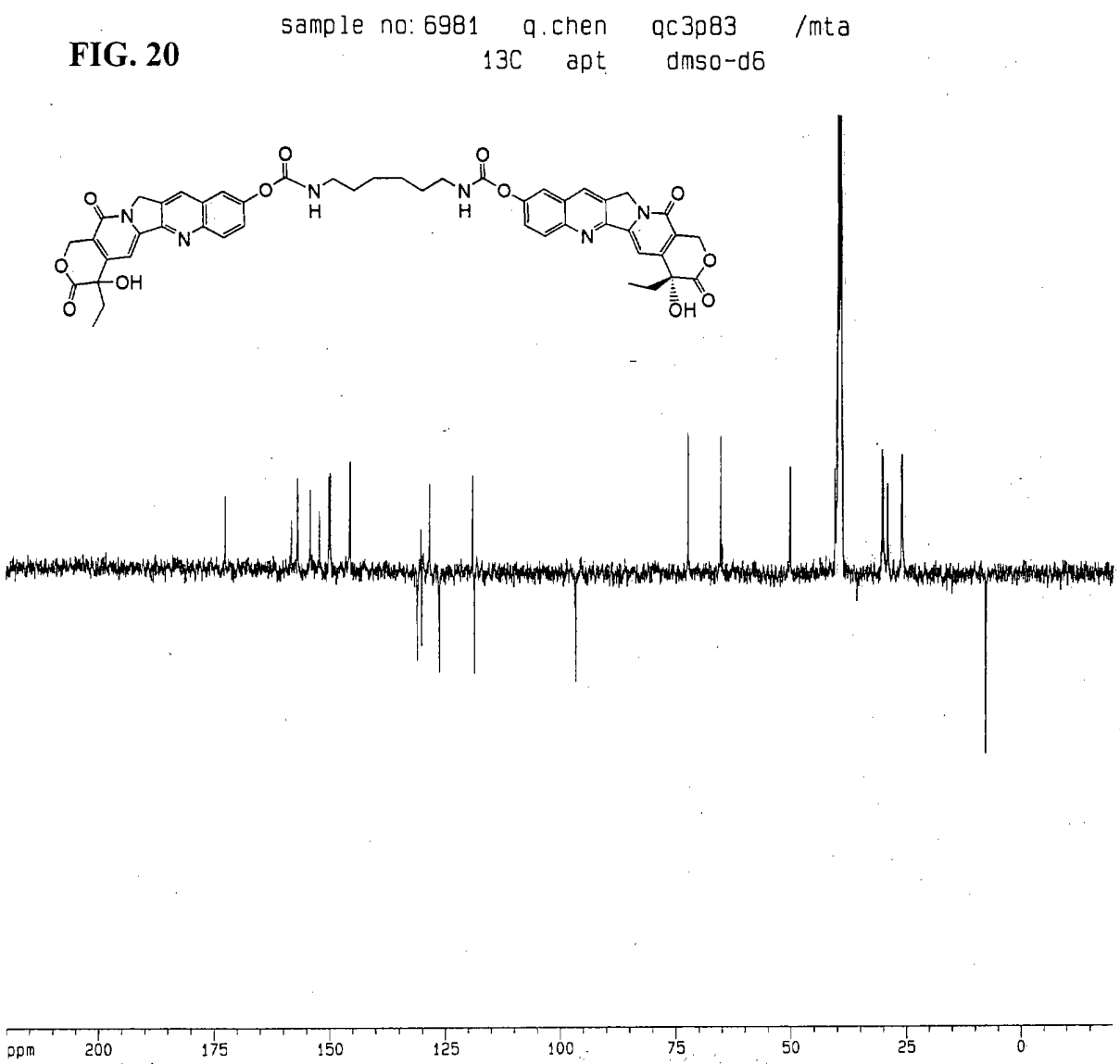


FIG. 19



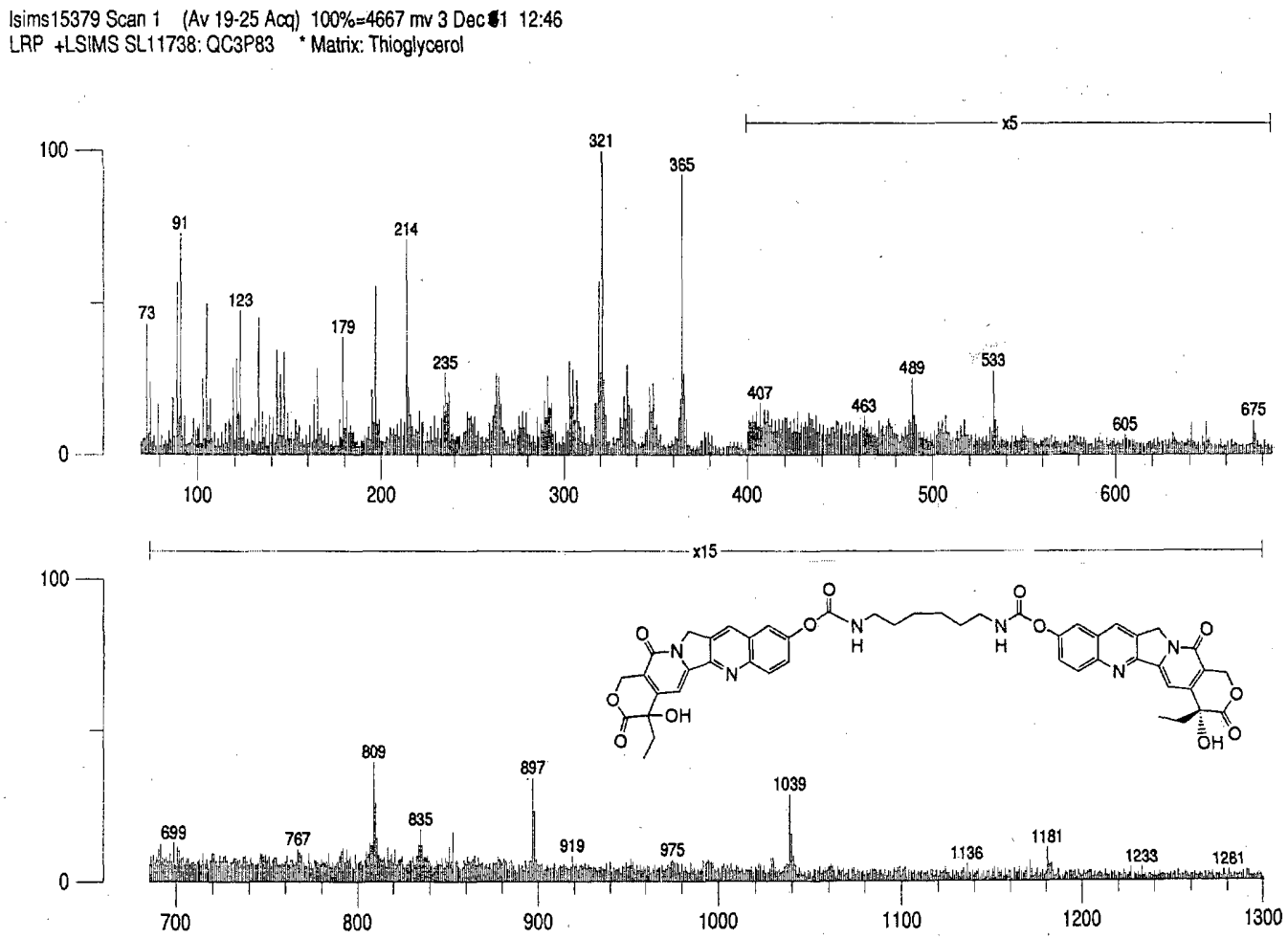

```
Current Data Parameters
NAME                  chen6981
EXPNO                        1
PROCNO                       1

F2 - Acquisition Parameter
Date_                 20011204
Time                      9.59
INSTRUM                 av400
PROBHD     5 mm BBI 1H-
PULPROG                  zg30
TD                      32768
SOLVENT                  DMSO
NS                        140
DS                          2
SWH                4990.020 Hz
FIDRES             0.152283 Hz
AQ                 3.2834036 se
RG                       80.6
DW                 100.200 us
DE                   6.00 us
TE                   300.0 K
D1                 1.00000000 se

======== CHANNEL f1 ======
NUC1                        1H
P1                   10.00 us
PL1                   4.70 dB
SFO1          400.1320000 MH

F2 - Processing parameters
SI                      32768
SF            400.1300068 MH
WDW                        EM
SSB                         0
LB                   0.20 Hz
GB                          0
PC                       0.50

1D NMR plot parameters
CX                   20.00 cm
CY                   30.00 cm
F1P                 11.000 pp
F1                4401.43 Hz
F2P                -0.500 pp
F2                -200.07 Hz
PPMCM              0.57500 pp
HZCM             230.07475 Hz
```

FIG. 20




```
Current Data Parameters
NAME            chen6981
EXPNO                  2
PROCNO                 1

F2 - Acquisition Parameters
Date_           20011204
Time               10.13
INSTRUM            av400
PROBHD     5 mm BBI 1H-
PULPROG              jmod
TD                  32768
SOLVENT             CDCl3
NS                   2730
DS                      4
SWH           25062.656 Hz
FIDRES         0.764852 Hz
AQ             0.6537716 sec
RG               14596.5
DW               19.950 usec
DE                35.57 usec
TE                300.0 K
CNST2         145.0000000
CNST11          1.0000000
D1            3.00000000 sec
d13           0.00000300 sec
d20           0.00689655 sec
DELTA         0.00001783 sec

======== CHANNEL f1 ========
NUC1                 13C
P1                 14.00 usec
p2                 28.00 usec
PL1                 3.00 dB
SFO1         100.6227290 MHz

======== CHANNEL f2 ========
CPDPRG2          waltz16
NUC2                 1H
PCPD2              70.00 usec
PL2               120.00 dB
PL12               21.60 dB
SFO2         400.1320000 MHz

F2 - Processing parameters
SI                  32768
SF           100.6128203 MHz
WDW                    EM
SSB                     0
LB                   5.00 Hz
GB                      0
PC                   1.00

1D NMR plot parameters
CX                  20.00 cm
CY                  20.00 cm
F1P                220.000 ppm
F1               22134.82 Hz
F2P                -20.000 ppm
F2               -2012.26 Hz
PPMCM             12.00000 ppm/cm
HZCM           1207.35400 Hz/cm
```

FIG. 21


lsims15379 Scan 1 (Av 19-25 Acq) 100%=4667 mv 3 Dec 01 12:46
LRP +LSIMS SL11738: QC3P83 * Matrix: Thioglycerol
x5
100
0
321
365
91
214
73
123
179
235
407
463
489
533
605
675
100
200
300
400
500
600
x15
100
0
809
897
1039
699
767
835
919
975
1136
1181
1233
1261
700
800
900
1000
1100
1200
1300
O
N
H
OH

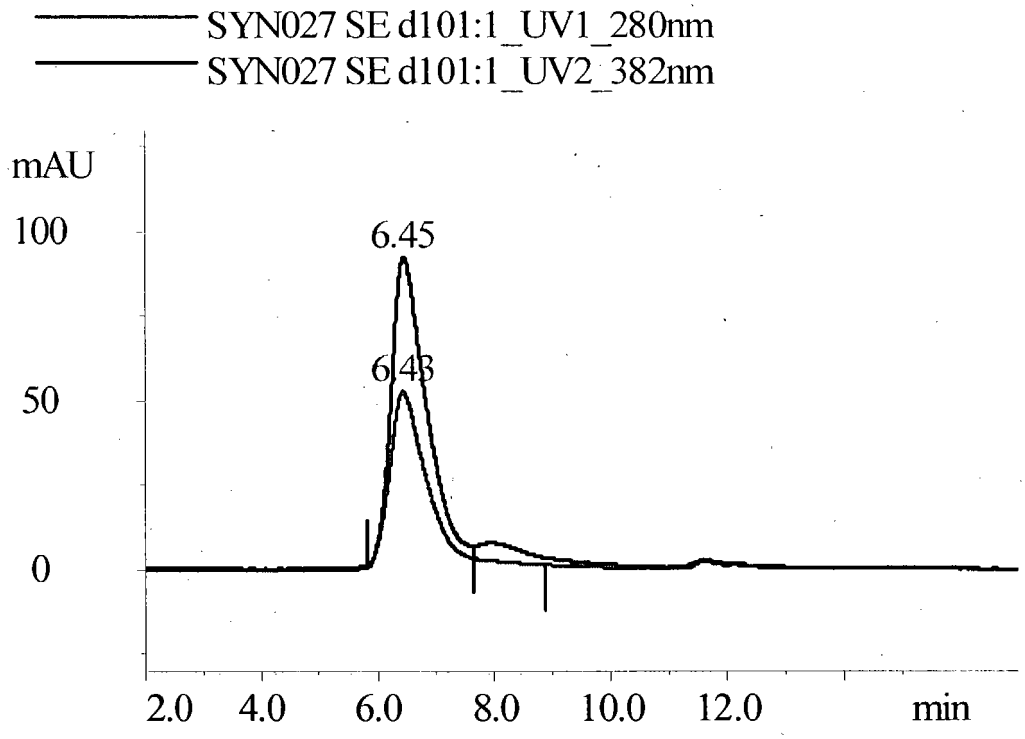

SYN027 SE d101:1_UV1_280nm
SYN027 SE d101:1_UV2_382nm
mAU
100
50
0
6.45
6.43
2.0
4.0
6.0
8.0
10.0
12.0
min

FIG. 22

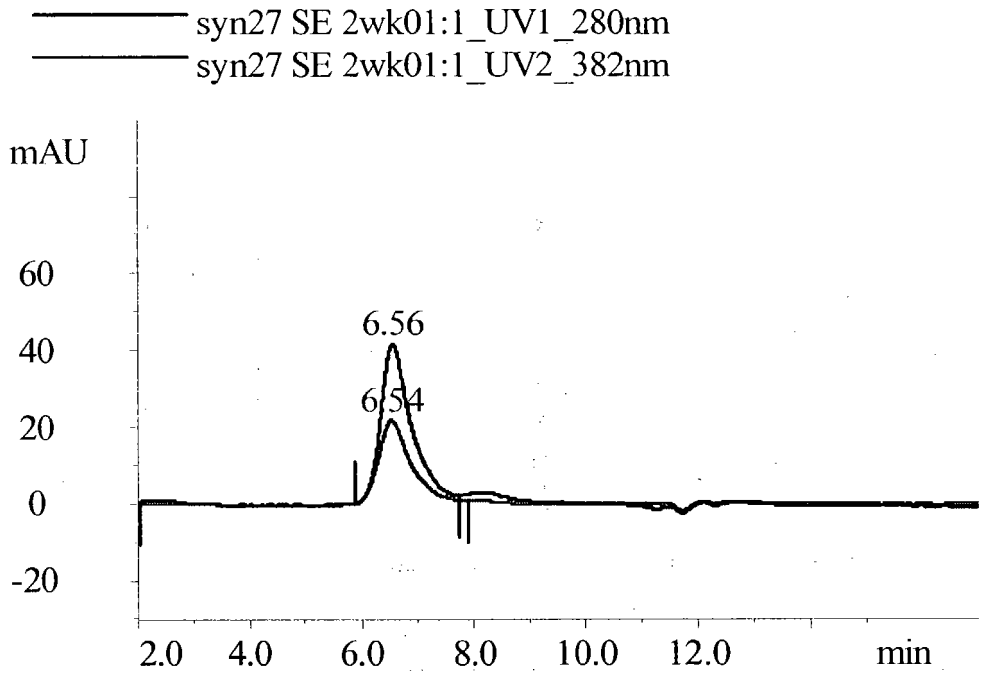
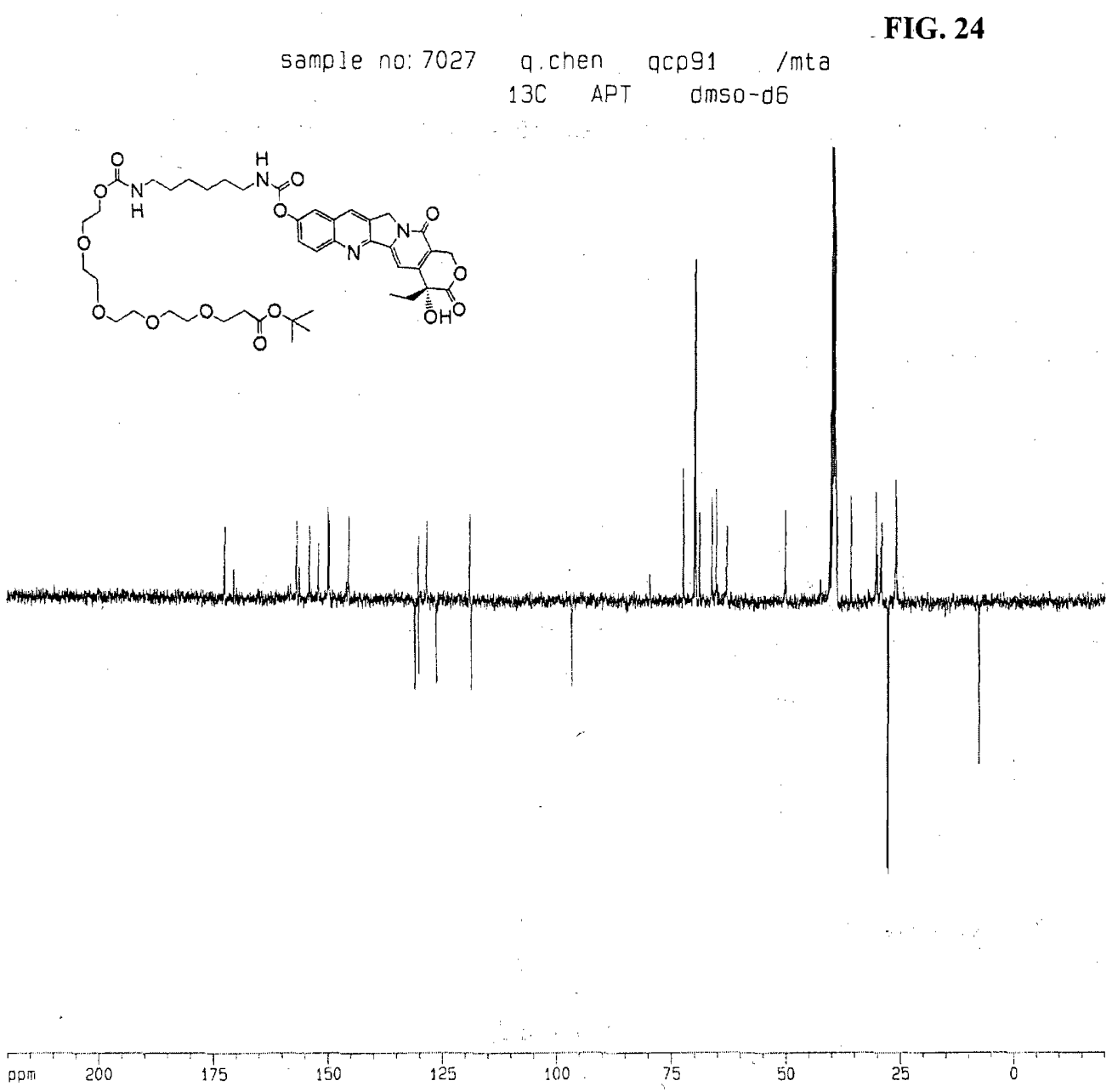

syn27 SE 2wk01:1_UV1_280nm
syn27 SE 2wk01:1_UV2_382nm
mAU
60
40
20
0
-20
6.56
6.54
2.0
4.0
6.0
8.0
10.0
12.0
min

FIG. 23

FIG. 24




```
Current Data Parameters
NAME                  chen7027
EXPNO                        2
PROCNO                       1

F2 - Acquisition Parameters
Date_               20011218
Time                      9.21
INSTRUM                  av400
PROBHD     5 mm BBI 1H-
PULPROG                  jmod
TD                       32768
SOLVENT                  DMSO
NS                        2570
DS                           4
SWH                25062.656 Hz
FIDRES             0.764852 Hz
AQ                 0.6537716 sec
RG                    23170.5
DW                   19.950 usec
DE                    35.57 usec
TE                    300.0 K
CNST2              145.0000000
CNST11               1.0000000
D1                 3.00000000 sec
d13                0.00000300 sec
d20                0.00689655 sec
DELTA              0.00001783 sec

======== CHANNEL f1 ========
NUC1                      13C
P1                    14.00 usec
p2                    28.00 usec
PL1                    3.00 dB
SFO1              100.6227290 MHz

======== CHANNEL f2 ========
CPDPRG2                waltz16
NUC2                      1H
PCPD2                 70.00 usec
PL2                  120.00 dB
PL12                  17.00 dB
SFO2              400.1320000 MHz

F2 - Processing parameters
SI                       32768
SF                100.6128172 MHz
WDW                         EM
SSB                          0
LB                     3.00 Hz
GB                           0
PC                        1.00

1D NMR plot parameters
CX                    20.00 cm
CY                    15.00 cm
F1P                  220.000 ppm
F1                 22134.82 Hz
F2P                  -20.000 ppm
F2                 -2012.26 Hz
PPMCM                12.00000 ppm/cm
HZCM               1207.35388 Hz/cm
```

FIG. 25

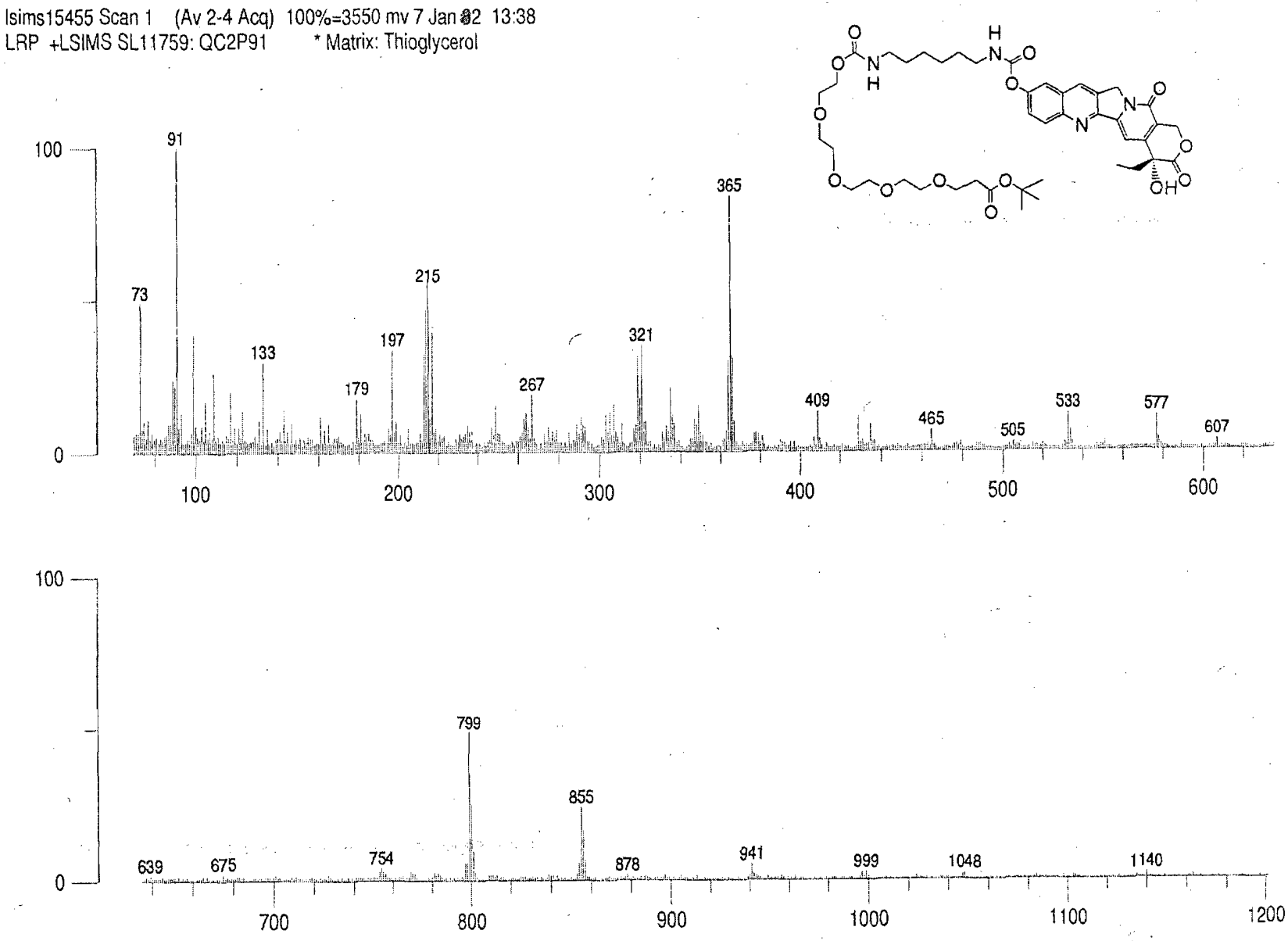

lsims15455 Scan 1 (Av 2-4 Acq) 100%=3550 mv 7 Jan 02 13:38
LRP +LSIMS SL11759: QC2P91 * Matrix: Thioglycerol
100
0
91
73
133
179
197
215
267
321
365
409
465
505
533
577
607
100
200
300
400
500
600
100
0
799
855
639
675
754
878
941
999
1048
1140
700
800
900
1000
1100
1200

FIG. 26

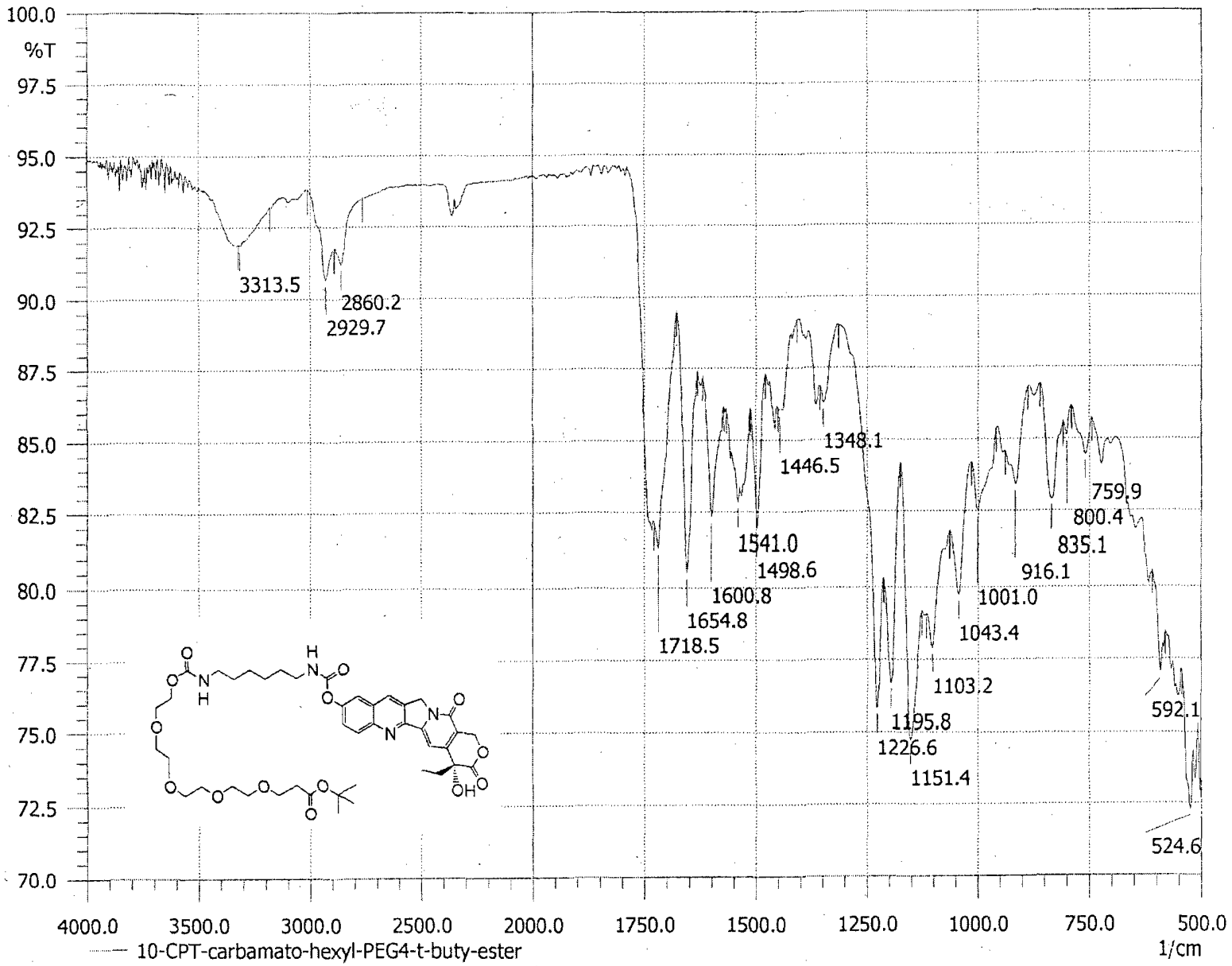
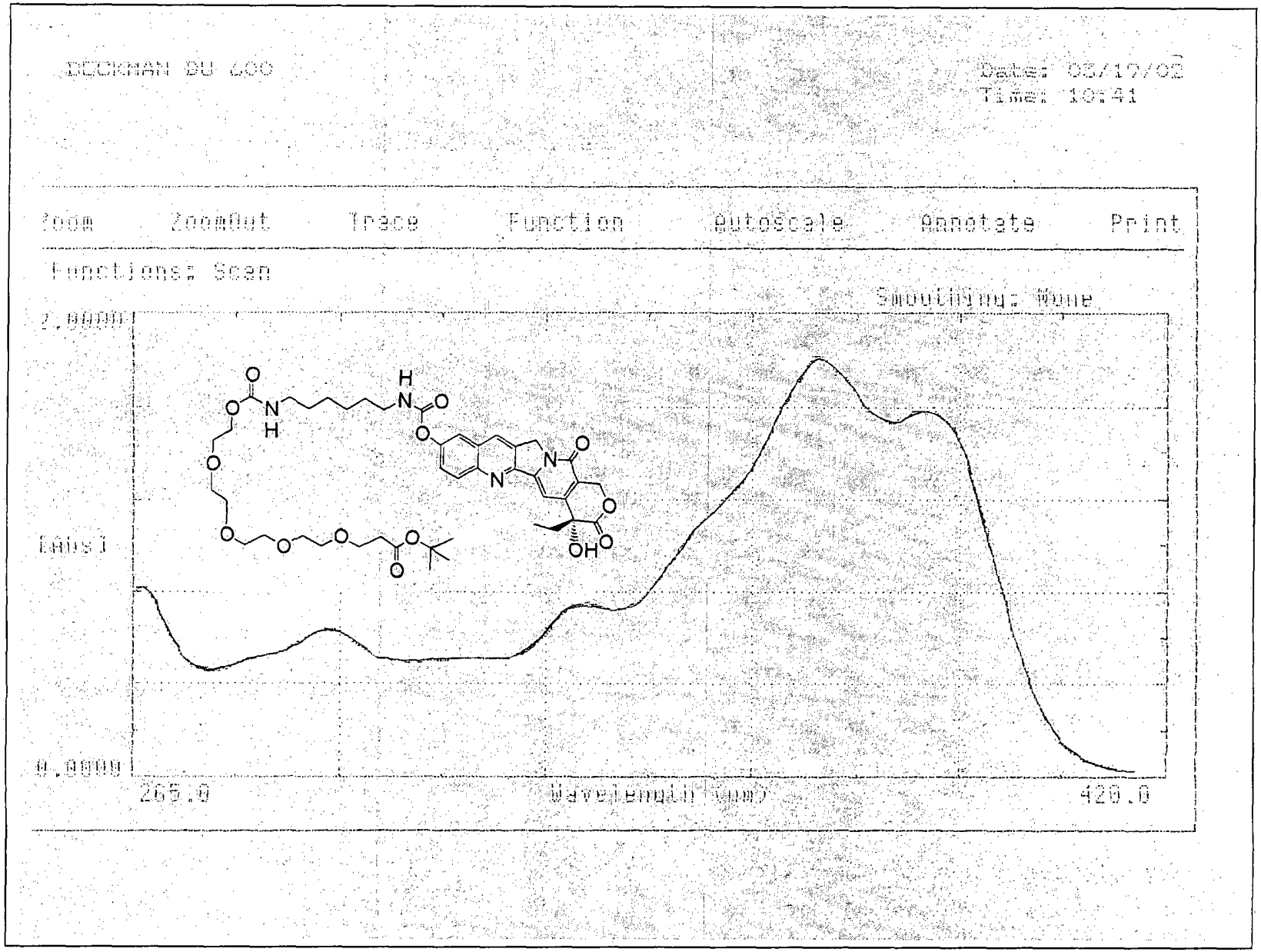
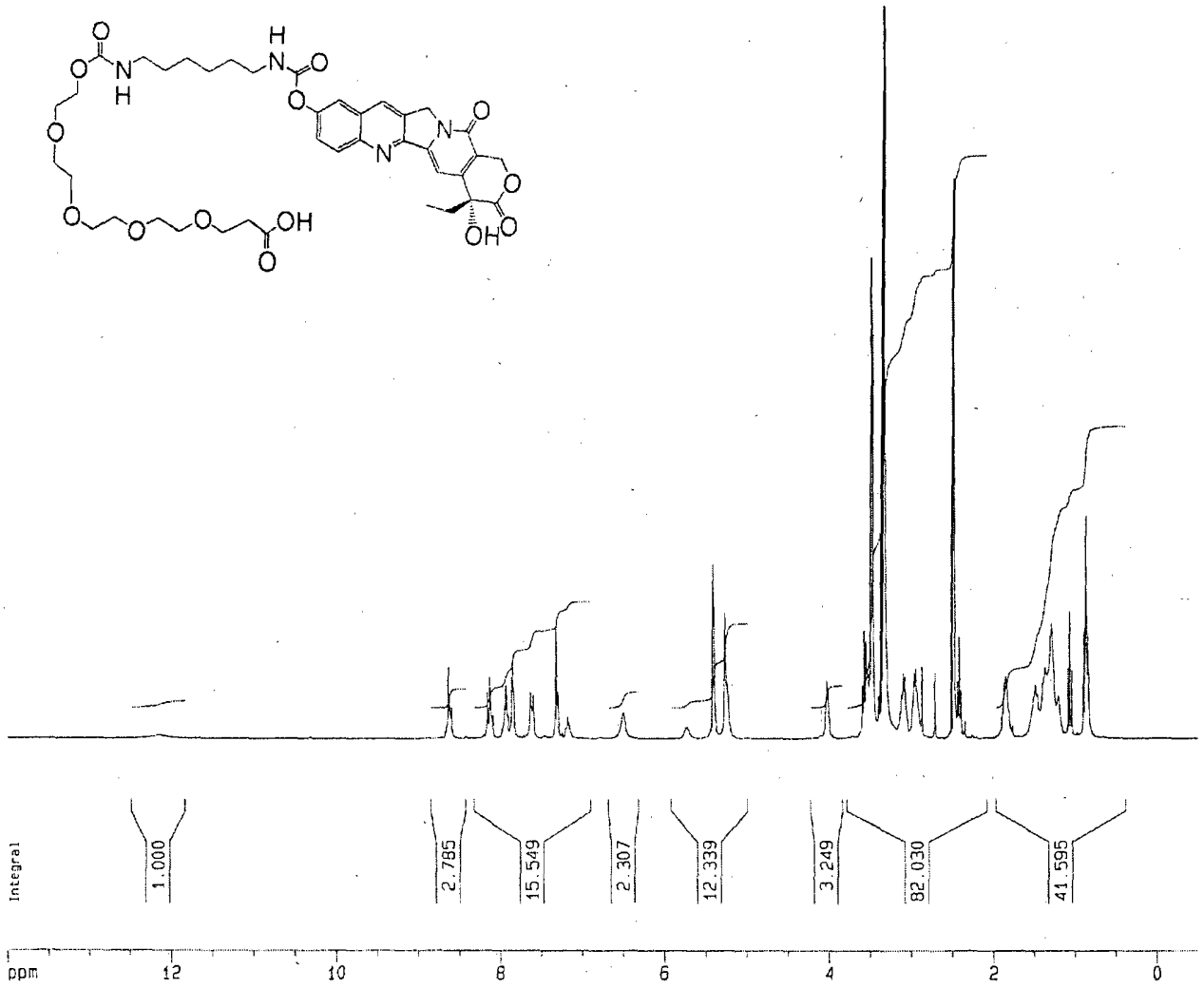

100.0
%T
97.5
95.0
92.5
90.0
87.5
85.0
82.5
80.0
77.5
75.0
72.5
70.0
3313.5
2860.2
2929.7
1718.5
1654.8
1600.8
1541.0
1498.6
1446.5
1348.1
1226.6
1195.8
1151.4
1103.2
1043.4
1001.0
916.1
835.1
800.4
759.9
592.1
524.6
4000.0
3500.0
3000.0
2500.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.0
500.0
1/cm
10-CPT-carbamato-hexyl-PEG4-t-buty-ester

FIG. 27


BECKMAN DU 650
Date: 03/19/02
Time: 10:41
Zoom
ZoomOut
Trace
Function
Autoscale
Annotate
Print
Functions: Scan
Smoothing: None
2.0000
[Abs]
0.0000
265.0
Wavelength (nm)
420.0

sample no: 1188 q.chen qc4p18 /mta
1H dmso-d6

FIG. 28



Current Data Parameters
NAME chen1188
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20020218
Time 8.58
INSTRUM av300
PROBHD 5 mm GNP 1H/
PULPROG zg30
TD 32768
SOLVENT DMSO
NS 256
DS 2
SWH 6313.131 Hz
FIDRES 0.192661 Hz
AQ 2.5952756 sec
RG 574.7
DW 79.200 usec
DE 6.00 usec
TE 300.0 K
D1 1.00000000 sec

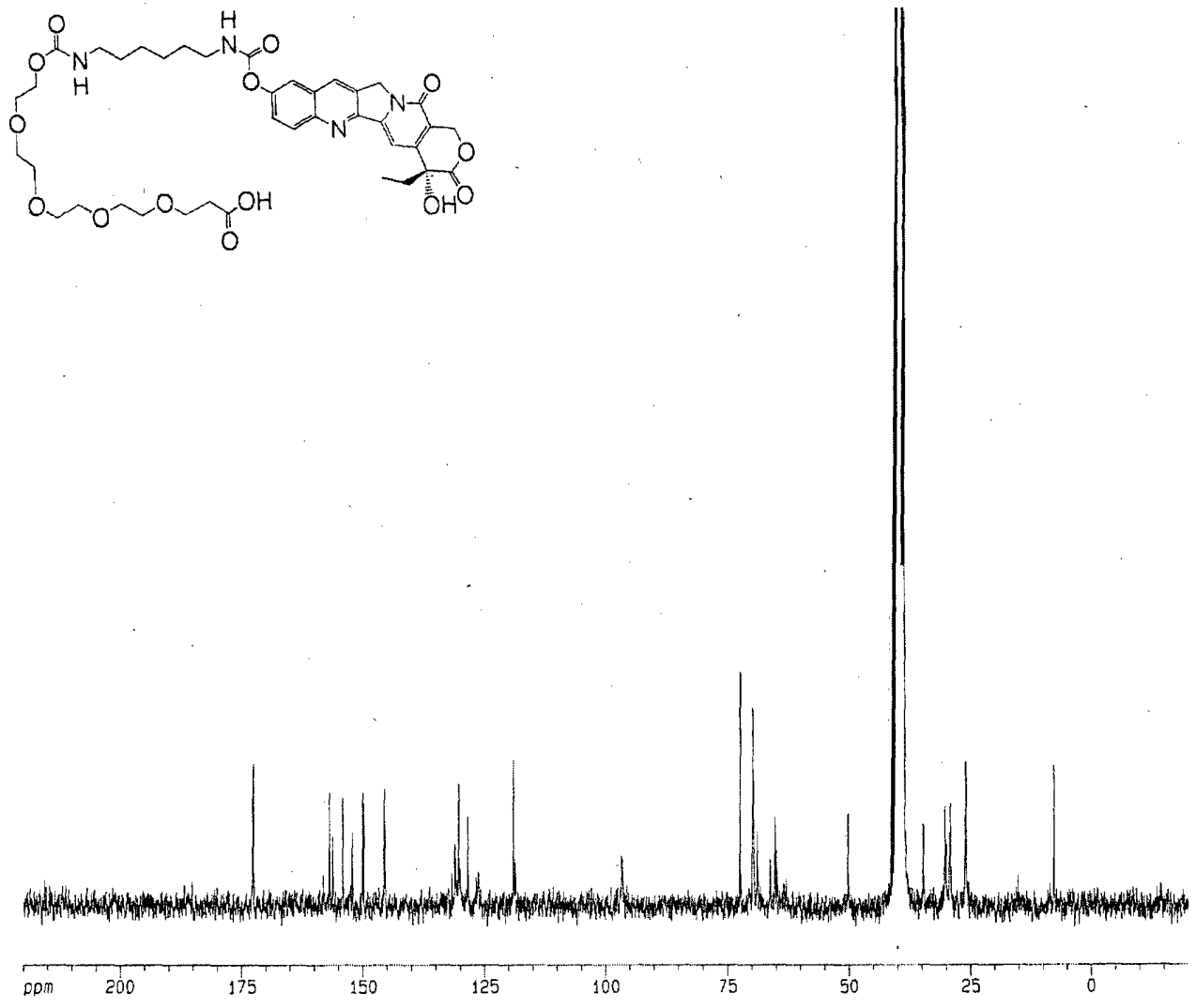
======== CHANNEL f1 ========
NUC1 1H
P1 13.00 usec
PL1 0.00 dB
SFO1 300.1316000 MHz

F2 - Processing parameters
SI 16384
SF 300.1300034 MHz
WDW EM
SSB 0
LB 0.10 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
CY 12.00 cm
F1P 14.000 ppm
F1 4201.82 Hz
F2P -0.500 ppm
F2 -150.06 Hz
PPMCM 0.72500 ppm/cm
HZCM 217.59425 Hz/cm

sample no: 1188 q.chen qc4p18 /mta
13C bb dmso-d6

FIG. 29



Current Data Parameters
NAME chen1188
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20020220
Time 15.21
INSTRUM av300
PROBHD 5 mm GNP 1H/
PULPROG zgpg30
TD 65536
SOLVENT DMSO
NS 15360
DS 4
SWH 18832.393 Hz
FIDRES 0.287360 Hz
AQ 1.7400308 sec
RG 16384
DW 26.550 usec
DE 37.93 usec
TE 300.0 K
D1 1.00000000 sec
d11 0.03000000 sec
d12 0.00002000 sec

======== CHANNEL f1 ========
NUC1 13C
P1 10.00 usec
PL1 0.00 dB
SFO1 75.4755190 MHz

======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 80.00 usec
PL2 120.00 dB
PL12 14.00 dB
PL13 14.00 dB
SFO2 300.1312005 MHz

F2 - Processing parameters
SI 32768
SF 75.4677845 MHz
WDW EM
SSB 0
LB 3.00 Hz
GB 0
PC 1.00

1D NMR plot parameters
CX 20.00 cm
CY 200.00 cm
F1P 220.000 ppm
F1 16602.91 Hz
F2P -20.000 ppm
F2 -1509.36 Hz
PPMCM 12.00000 ppm/cm
HZCM 905.61340 Hz/cm

FIG. 30

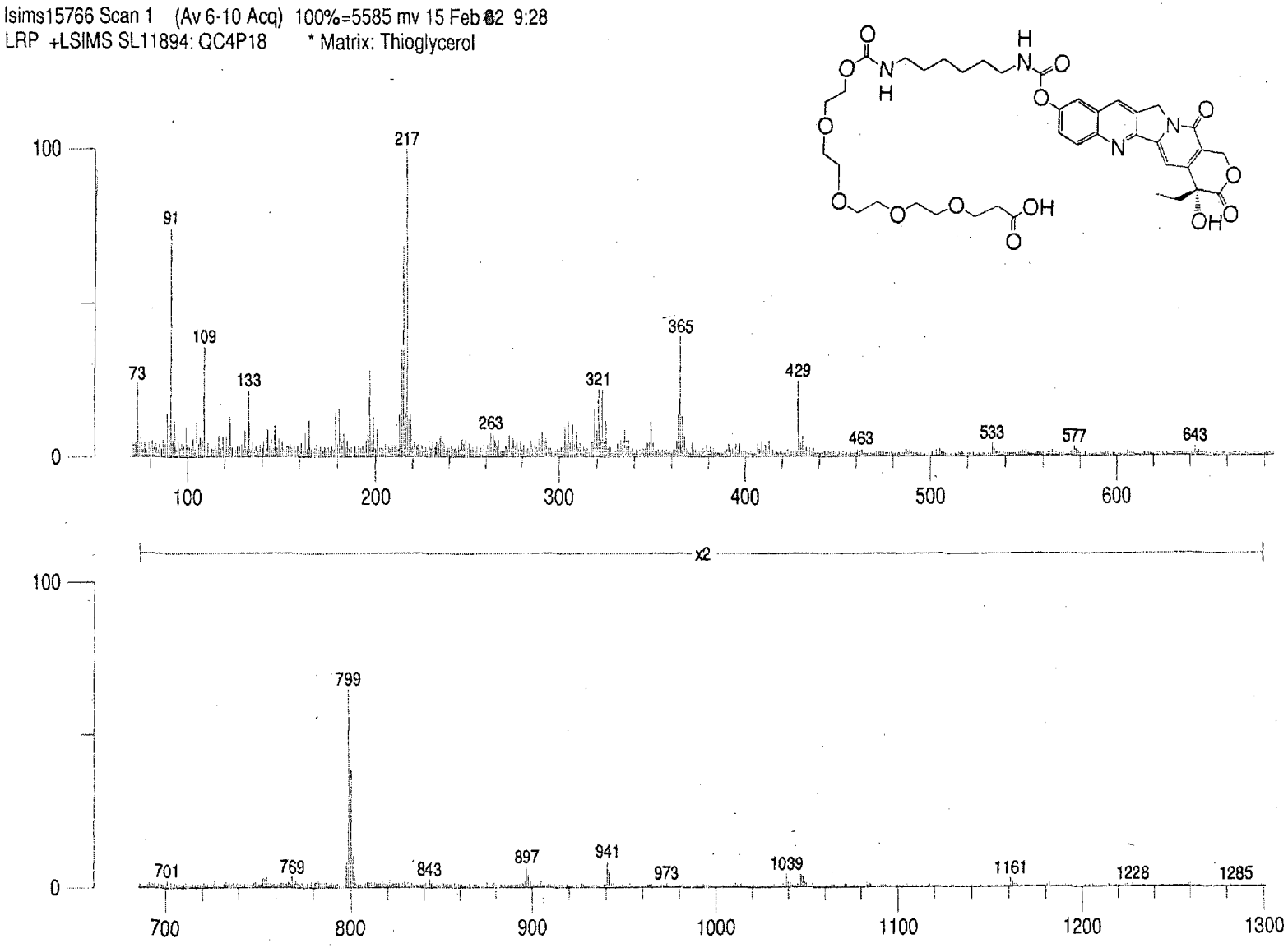

lsims15766 Scan 1 (Av 6-10 Acq) 100%=5585 mv 15 Feb 02 9:28
LRP +LSIMS SL11894: QC4P18 * Matrix: Thioglycerol
100
0
217
91
109
73
133
263
321
365
429
463
533
577
643
100
200
300
400
500
600
x2
100
0
799
701
769
843
897
941
973
1039
1161
1228
1285
700
800
900
1000
1100
1200
1300

FIG. 31

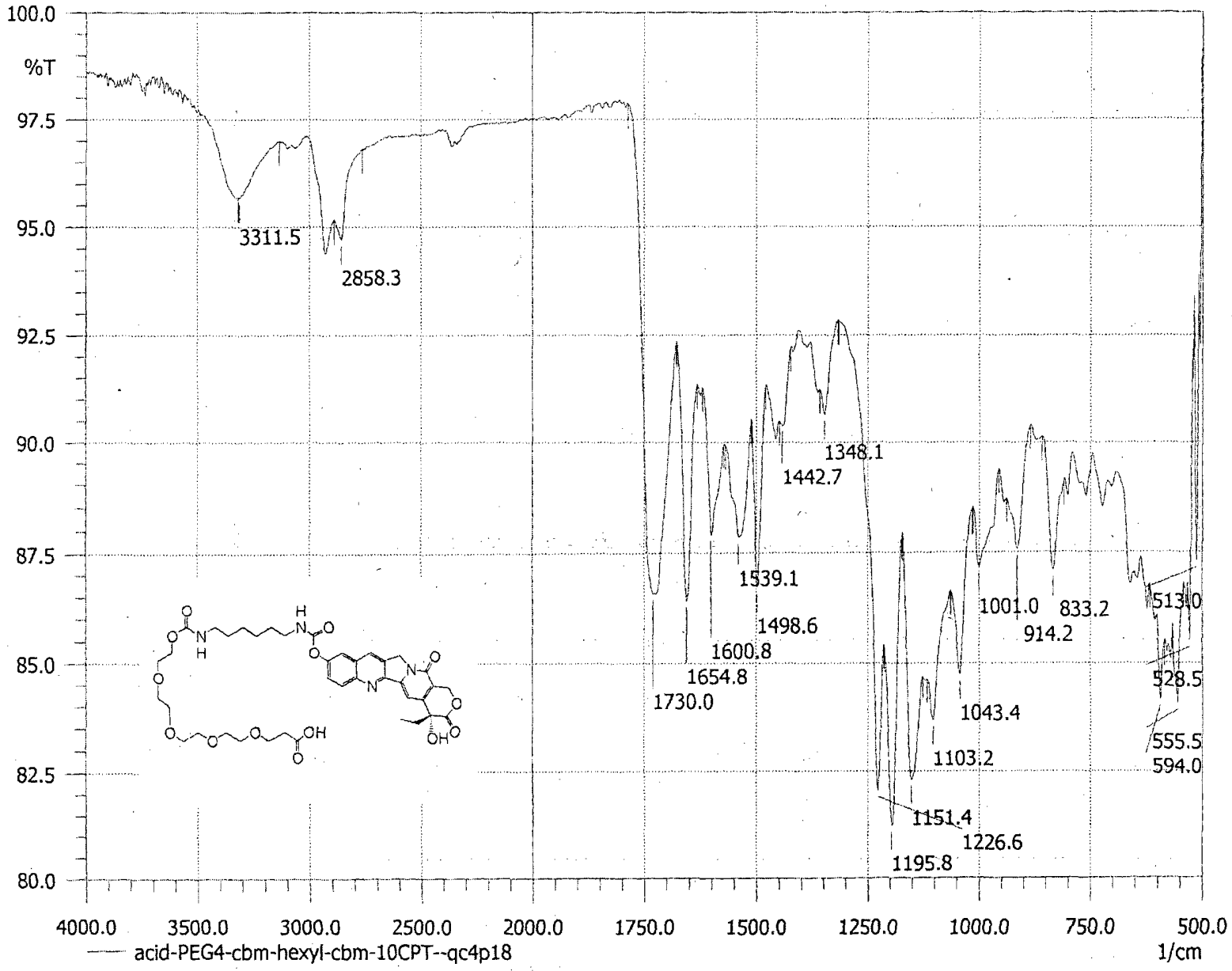

100.0
%T
97.5
95.0
92.5
90.0
87.5
85.0
82.5
80.0
3311.5
2858.3
1730.0
1654.8
1600.8
1539.1
1498.6
1442.7
1348.1
1195.8
1151.4
1226.6
1103.2
1043.4
1001.0
914.2
833.2
513.0
528.5
555.5
594.0
4000.0
3500.0
3000.0
2500.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.0
500.0
1/cm
acid-PEG4-cbm-hexyl-cbm-10CPT--qc4p18

FIG. 32

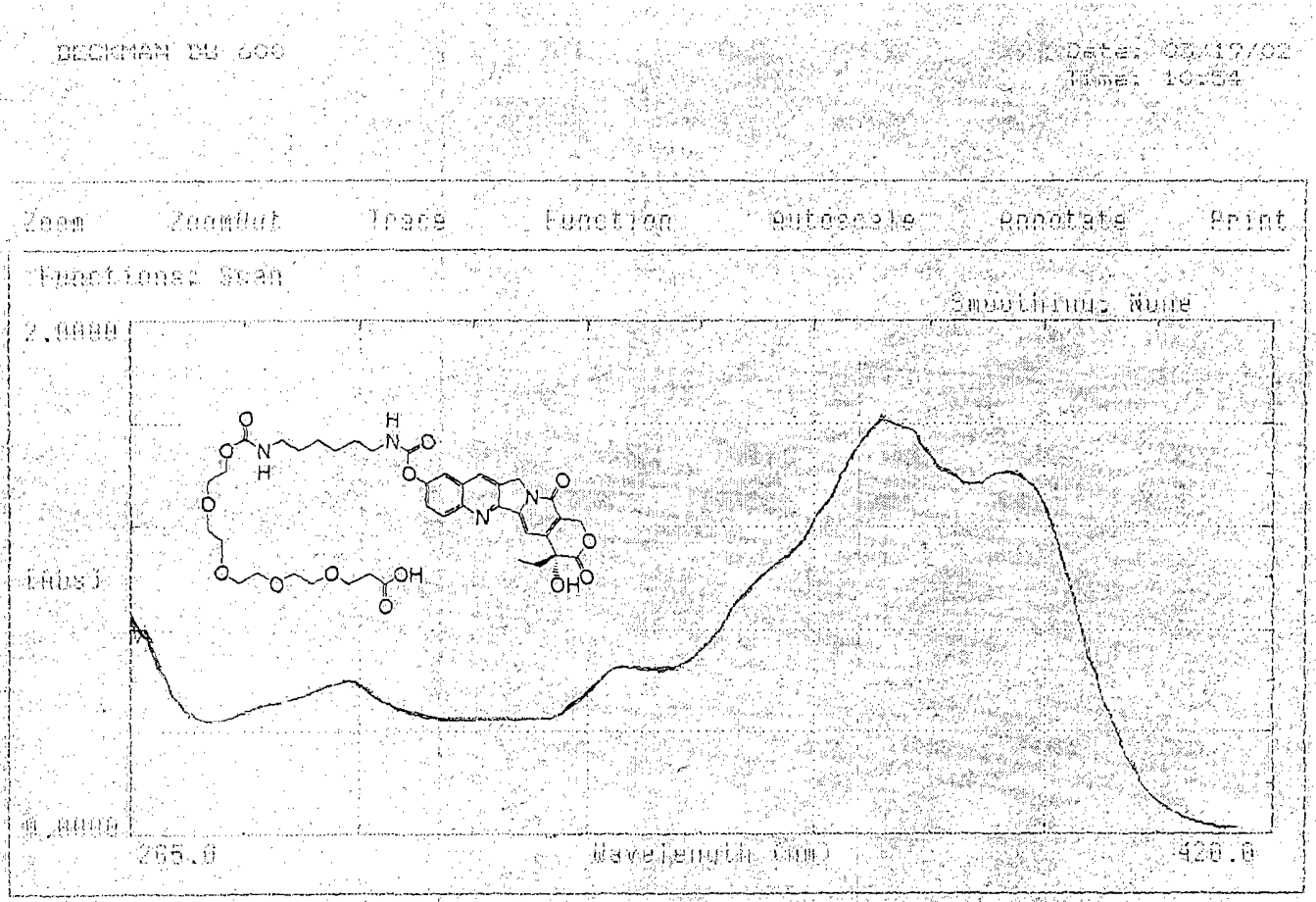

DECKMAN BU 600
Date: 03/19/02
Time: 10:54
Zoom
Zoomout
Trace
Function
Autoscale
Annotate
Print
Functions Scan
Simultaneous Runs
2.0000
Units
0.0000
265.0
Wavelength (nm)
420.0

FIG. 33

JOB NO: 1776 Q CHEN QC4P64
qc1776 1 1

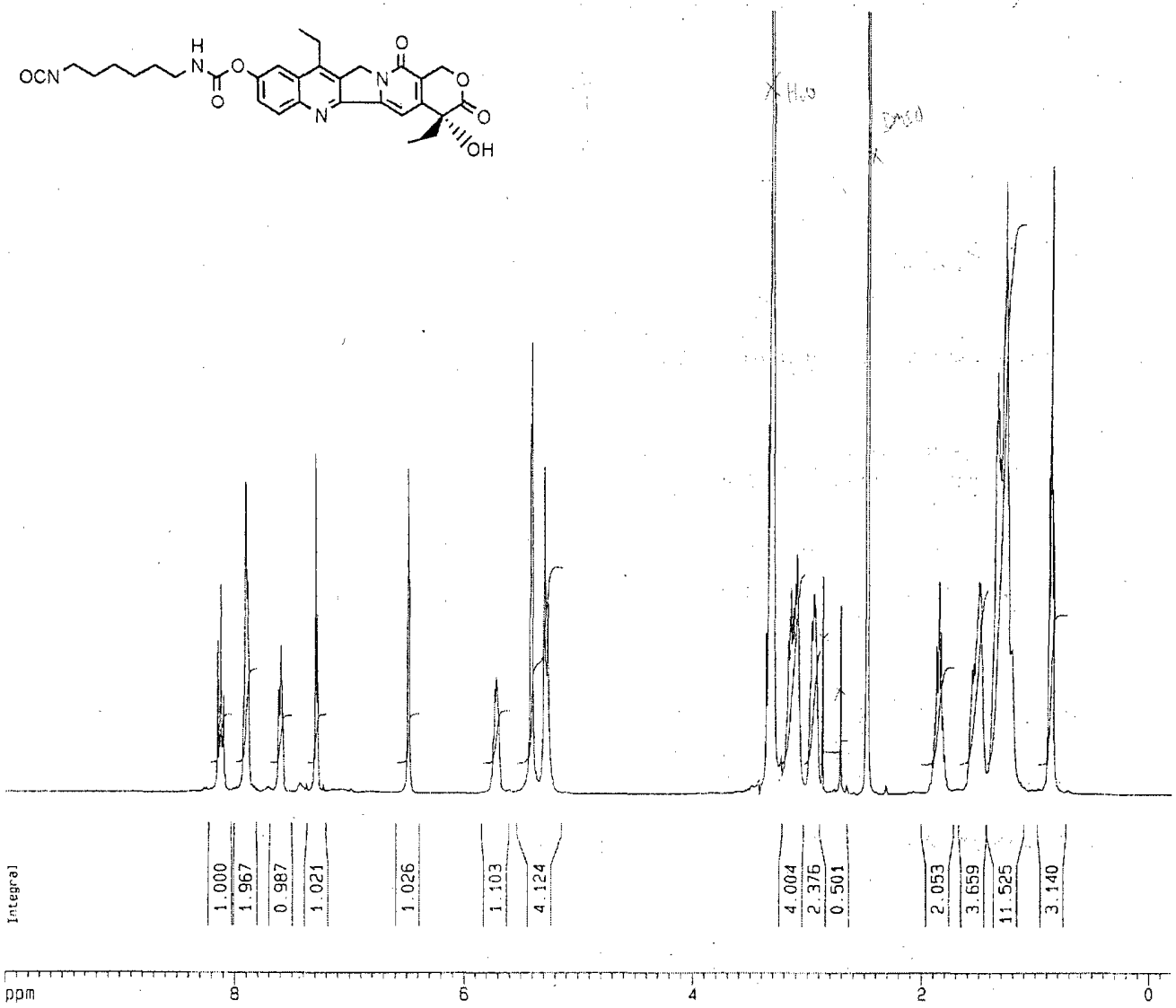
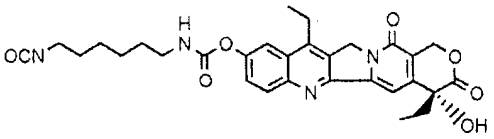
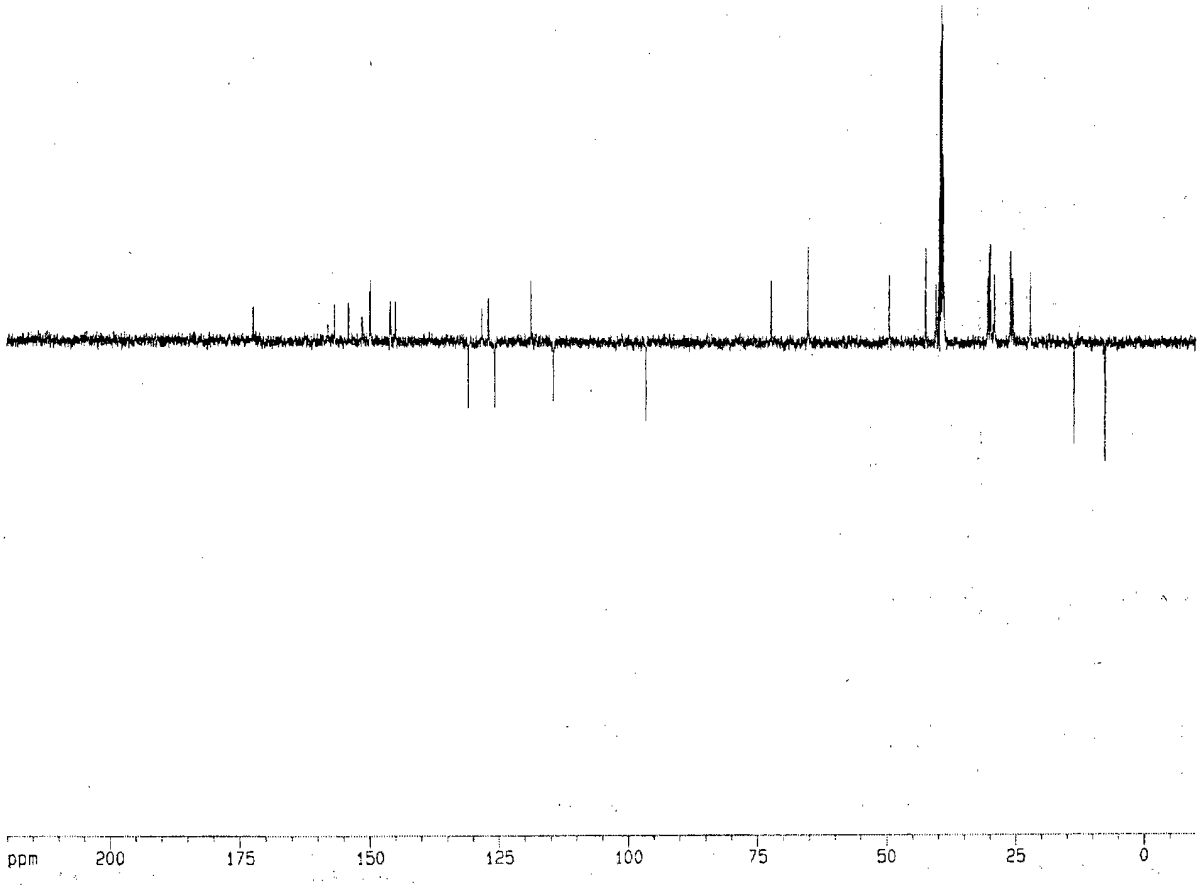


FIG. 34

JOB NO: 1776 Q CHEN QC4P64
qc1776 2 1 jmod expt





Current Data Parameters
NAME qc1776
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20020607
Time 10.37
INSTRUM av400
PROBHD 5 mm BBI 1H-
PULPROG jmod
TD 16384
SOLVENT DMSO
NS 6250
DS 4
SWH 25062.656 Hz
FIDRES 1.529703 Hz
AQ 0.3269108 sec
RG 20642.5
DW 19.950 usec
DE 35.57 usec
TE 300.0 K
CNST2 145.0000000
CNST11 1.0000000
D1 1.00000000 sec
d13 0.00000300 sec
d20 0.00689655 sec
DELTA 0.00001783 sec

======== CHANNEL f1 ========
NUC1 13C
P1 14.00 usec
p2 28.00 usec
PL1 -3.00 dB
SFO1 100.6227290 MHz

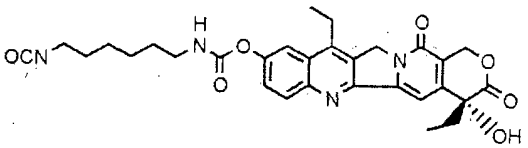
======== CHANNEL f2 ========
CPDPRG2 waltz16
NUC2 1H
PCPD2 70.00 usec
PL2 120.00 dB
PL12 21.60 dB
SFO2 400.1320000 MHz

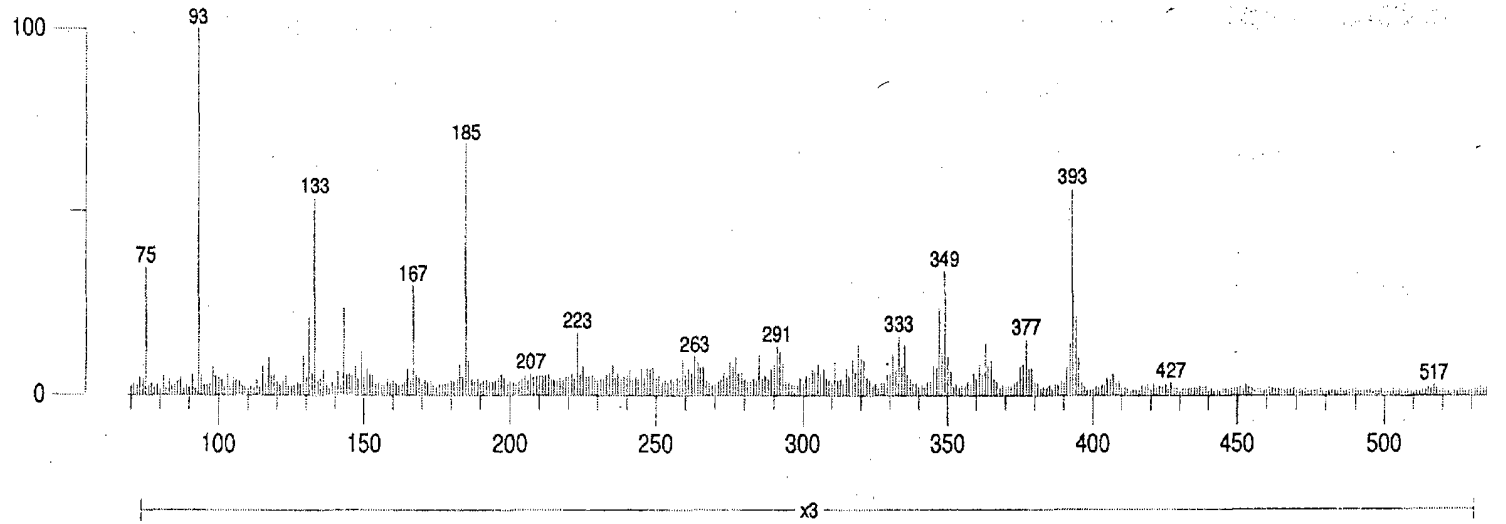
F2 - Processing parameters
SI 32768
SF 100.6128188 MHz
WDW EM
SSB 0
LB 2.00 Hz
GB 0
PC 0.50

1D NMR plot parameters
CX 20.00 cm
CY 0.00 cm
F1P 220.000 ppm
F1 22134.82 Hz
F2P -10.000 ppm
F2 -1006.13 Hz
PPMCM 11.50000 ppm/cm
HZCM 1157.94749 Hz/cm

FIG. 35

lsims16301 Scan 1 (Av 16-20 Acq) 100%=7600 mv 14 Jun 92 10:44
LRP +LSIMS SL12057: QC4P64 * Matrix: Glycerol





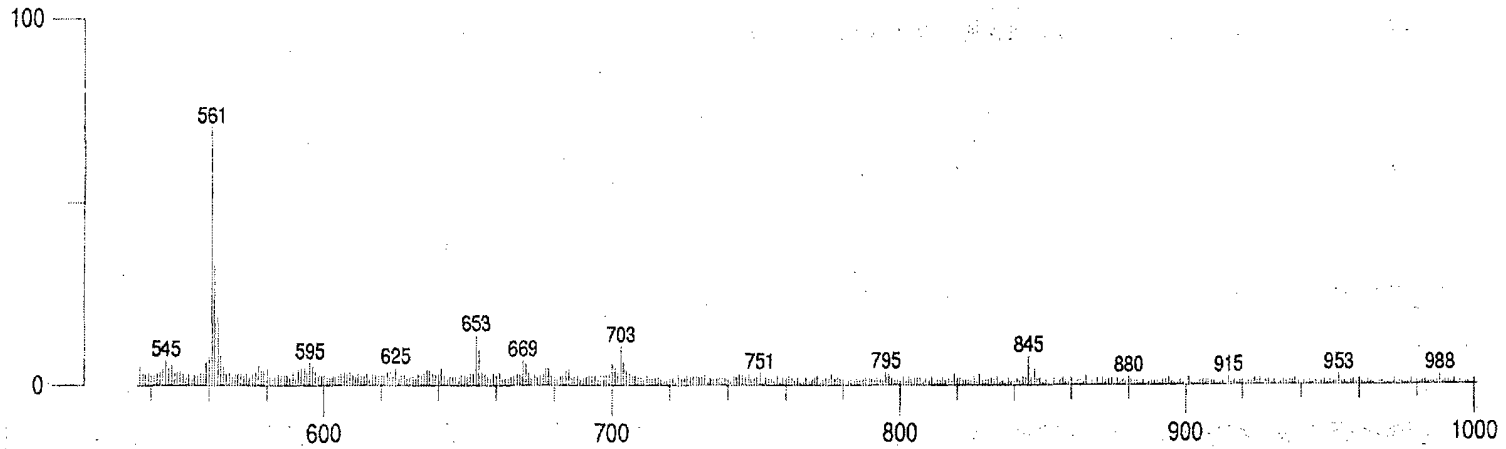
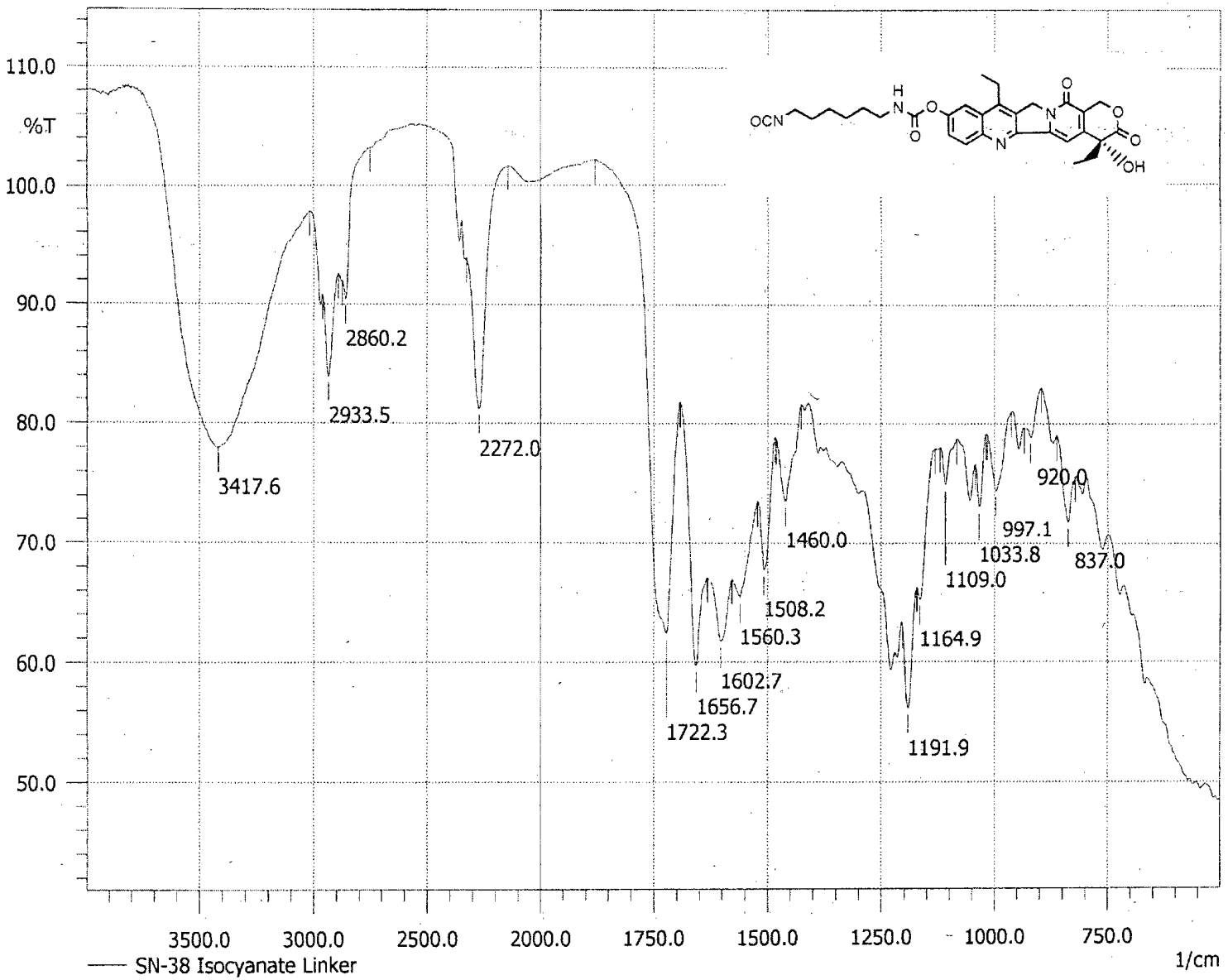


FIG. 36


110.0
%T
100.0
90.0
80.0
70.0
60.0
50.0
3417.6
2933.5
2860.2
2272.0
1722.3
1656.7
1602.7
1560.3
1508.2
1460.0
1191.9
1164.9
1109.0
1033.8
997.1
920.0
837.0
OCN
H
N
O
O
N
N
O
O
O
OH
3500.0
3000.0
2500.0
2000.0
1750.0
1500.0
1250.0
1000.0
750.0
1/cm
SN-38 Isocyanate Linker